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The Commonwealth of Massachusetts

ANNUAL REPORT
OF THE
DEPARTMENT OF LABOR
AND INDUSTRIES

FOR THE
YEAR ENDING NOVEMBER 30, 1926



DEPARTMENT OF LABOR AND INDUSTRIES

OFFICIALS.

E. LEROY SWEETSER, EVERETT, *Commissioner*.
 ETHEL M. JOHNSON, BOSTON, *Assistant Commissioner*.
 EDWARD FISHER, LOWELL, *Associate Commissioner*.
 HERBERT P. WASGATT, WABAN, *Associate Commissioner*.
 SAMUEL ROSS, NEW BEDFORD, *Associate Commissioner*.

HEADS OF DIVISIONS AND BRANCHES.

Board of Conciliation and Arbitration.

EDWARD FISHER. HERBERT P. WASGATT. SAMUEL ROSS.

Division of Minimum Wage. ETHEL M. JOHNSON, *Acting Director*.

EDWARD FISHER. HERBERT P. WASGATT. SAMUEL ROSS.

Division of Statistics. ROSWELL F. PHELPS, *Director*.

MARGARET SHEA, *Statistician for Manufactures*.

LESTER E. ARCHIBALD, *Statistician for Labor*.

Division of Industrial Safety. JOHN P. MEADE, *Director*.

JOSEPH MONETTE, *Counsel*.

Division of Standards. FRANCIS MEREDITH, *Director of Standards*.

PUBLIC EMPLOYMENT OFFICES.

Boston. HARRY G. DUNDERDALE, *Superintendent*.

Springfield. CHESTER A. ALLEN, *Superintendent*.

Worcester. WILLIAM A. WILDER, *Superintendent*.

Federal Director of Employment Service.

E. LEROY SWEETSER, *Commissioner*.

CONTENTS.

REPORT OF THE COMMISSIONER OF LABOR AND INDUSTRIES	PAGE
Administration	4
Hearings	4
Inspections	4
Complaints	4
Certification of Minors for Employment	5
Injuries in Industry	5
Employment	5
Salaries of Office Employees	5
Labor Troubles	5
Appropriation	6
Financial Statement	6
REPORT OF THE DIVISION OF INDUSTRIAL SAFETY	
Inspection Work	6
Summary of Inspections	7
Industrial Safety	8
Industrial Health	10
Lighting	11
Ventilation	11
Occupational Disease	12
Lead Poisoning	13
Anthrax	13
Dermatitis and Industrial Eczema	14
Gas Poisoning	14
Chrome Poisoning	14
Employment of Women and Minors	15
Night Employment	15
Providing Seats for Women and Children	15
Lunch Period for Women and Children	16
Child Labor Laws	16
Injuries to Employed Children	16
Accident Prevention	18
Employment on Public Works	19
Weekly Payment Law	20
Home Work	21
Counsel's Office	21
Financial Statement	22

	PAGE
REPORT OF THE BOARD OF CONCILIATION AND ARBITRATION	
Conciliation	23
Cigarmakers, Boston	23
Textile Industry, New Bedford	25
Arbitration	26
List of Industries Affected and Principal Differences in Concilia- tion and Arbitration Cases	26
Financial Statement	26
REPORT OF THE MINIMUM WAGE COMMISSION	
Summary of Work for 1926	27
Outline of Functions	27
Publications	27
Conferences and Hearings	28
Investigations	28
Electrical Machinery and Supplies	28
Wage Board Work	28
Candy Wage Board, Reconvened	28
Jewelry and Related Lines Wage Board	29
Toys, Games and Sporting Goods Wage Board	29
Enforcement of Wage Decrees	30
Tables	31
I—Disposition of Cases of Non-compliance Pending from 1925	31
II—Summary of Inspections for 1926	32
Minimum Wage Decrees Established in Massachusetts	34
Financial Statement	34
REPORT OF THE DIVISION OF STANDARDS	
Legislation Enacted in 1926	35
Establishment of Standard Sizes of Anthracite Coal	36
Operators' Guarantee to Retailers	37
Legal Standard Sizes for Anthracite Coal	38
Retailers' Coal Screens	39
Division Publications	39
Clinical Thermometers	39
Laboratory Work	40
Field Work of Inspectors	41
Prosecutions	42
Office Work	42
Licenses	43
Educational and Co-operative Activities	43
Local Sealers of Weights and Measures	44
Summary of Local Sealers' Work	44
Summary of Prosecutions	46
Financial Statement	47
REPORT OF THE DIVISION OF STATISTICS	
Functions	47
Statistics of Labor	48
Annual Report on the Statistics of Labor	48
Monthly Surveys and Press Notices	48
Building Statistics	50
Salaries of Office Employees in Massachusetts	53
Record of Industrial Disputes	54
Information Service	55
Statistics of Manufactures	55
Annual Report of the Statistics of Manufactures	55
Census of Power Laundries	59
Index of Manufacturing Establishments	59
Public Employment Offices	59
Statistical Summary	60
Veterans	63
Co-operation with United States Employment Service	64
Appropriation	64
Financial Statement	65

REPORT OF THE COMMISSIONER OF LABOR AND INDUSTRIES

To the General Court.

There is submitted herewith the Annual Report of the Commissioner of Labor and Industries for the year ending November 30, 1926, containing the reports of the directors of the divisions into which the Department is organized and through which the work of the Department is conducted; a financial statement, showing the appropriations and expenditures; and a brief outline of the more important phases of the work of the Department.

Administration. There has been no change in the personnel of the commissioners or of the directors of the several divisions during the past year. The divisions of the department are as follows—the Division of Industrial Safety, the Board of Conciliation and Arbitration, the Division of Minimum Wage, the Division of Standards and the Division of Statistics.

Hearings. Only two petitions were heard and on these decisions were rendered by the full board; all others were adjusted without a hearing. Both of the petitions heard by the full board were brought under chapter 149, section 27, and the question at issue was the customary and prevailing rate of wages in the locality where the specified work was being done. The first had reference to the construction of the Bloomingdale hospital, Worcester, and the second to the construction of highway bridges in the towns of Cheshire and Adams.

Inspections. The law requires that the department shall make a regular and systematic investigation of all places of employment and the conditions of safety and health pertaining thereto. In this connection there were 59,717 inspections and reinspections during the year. This included the inspection of 43,858 establishments in which 914,544 men, women and children were employed. As a result of these inspections 15,877 orders were issued in order to bring about compliance with the laws or to correct conditions affecting the safety and health of the employees. It is to be expected that as a result of thorough inspection for a series of years the number of orders which it will be found necessary to issue in succeeding years would decrease both in numbers and in importance, and this I find to be the case. Since 1921, the second year after the reorganization of the department, the number of orders issued has continuously decreased from 22,754 in 1921 to 15,877 in 1926; while over half of those issued during the past year related merely to technical violations of the law, such as the posting of time notices and the securing of school certificates.

Complaints. One of the methods of keeping informed of conditions and of the violation of the laws, which it is the duty of the Department to enforce, is through complaints received from outside sources. Although the Department receives many complaints which, upon investigation, prove to be unfounded, or the complainants do not fully understand the requirements, practically all such complaints received are investigated, and like our orders correcting conditions, these are gradually becoming less in number each year. The total number of complaints received in 1926 was 659, which is the smallest number received since the Department was organized. Of the several classes of complaints those relative to non-payment of wages are increasing in number. The law relative to weekly payment of wages provides that the Department may take action against any person for its violation, and the complaints with reference to this requirement and the total amount involved are increasing each year. A majority of these complaints are directed against irresponsible employers whose employees have not received any money or only a small part of that which is due. In these cases the financial status of the employee is such that he cannot afford to lose his pay and the amount

is so small that it does not warrant the expense of civil action. During the year 1947 of these cases were handled by the Department, and the total amount collected for complainants, without any expense to them whatever, was \$28,704.63—an increase over the year 1920 of 1174 cases and \$22,955.13 in the amount collected.

Certification of Minors for Employment. A new and complete bulletin has been prepared jointly by the Department of Education and this Department including, in addition to matters relating to the schools, the certification of minors for employment. This presents a common and authoritative source of reference and will give complete information to those authorized to issue employment and educational certificates and to those charged with the health and certification of working children. Certain provisions of the law and administrative regulations governing them are cited in the bulletin and prescribed forms involved and the form of report required in the discharge of the respective responsibilities are shown. In this connection a new record blank called Form M—physicians certificate of health—has been prepared and at the suggestion of the Commissioner is prescribed by the Department of Education to be used with the issue of employment certificates and thereby makes it a part of the record that is required to be kept by law.

Injuries in Industry. No part of the work of the Department exceeds in importance or is of more real benefit to the worker, employer and the public than that of the prevention of industrial injuries. It is impossible to show how many injuries have been prevented as a result of the work of the Department. The work requires constant and intelligent effort on the part of the inspectors and continual publicity and watchfulness on the part of the Department.

The total number of injuries of every nature, including occupational diseases, reported to the Department of Industrial Accidents for the year ending June 30, 1926, was 162,239. The number of tabulatable injuries, which are those causing loss of time exceeding in duration the remainder of the day or shift during which the injury occurred, numbered 59,462. This is an increase of 1,017 over the previous year. The tabulatable injuries are classified as follows:—Fatal, 314; permanent—total, 12; permanent—partial, 1158; and temporary, 58,008.

Employment. The total number of persons whom the Department assisted in obtaining work through the four public employment offices was 34,294, which is 512 less than the number in 1925. There was a decrease of 1081 in the total number of applicants referred to positions. Of the 34,294 persons placed, 21,426 were males and 12,868 were females, and included among the male applicants for whom positions were found were 3150 veterans.

Salaries of Office Employees. An important feature of the work of the Division of Statistics during the past year was a survey of salaries of office employees. Information with reference to this group of employees has hitherto been very meagre. The Department was among the first of the agencies collecting industrial statistics to recognize the need of authentic and comprehensive data of this character. Evidence that the information obtained has already served a useful purpose is found in the fact that Griffenhagen & Associates, Ltd., who were engaged by the State Commission on Administration and Finance to make a survey and report on the classification and revision of salaries of employees of the Commonwealth, made quite extensive use of the results of this survey of the salaries of office employees in private employment.

Labor Troubles. During the year 1926 the number of strikes which occurred in Massachusetts was 65 and the number of employees directly or indirectly affected was 20,615 as compared with 69 strikes affecting 22,729 employees in 1925, showing a small decrease both in the number of strikes and the number of employees. The most important of these disputes were in the garment trades and in the textile and the cigar-making industries.

The Board of Conciliation and Arbitration has kept in close touch with labor controversies and has been instrumental in settling strikes as well as in preventing their occurrence. The Board has heard and rendered decisions in 201 cases which have been submitted to it for arbitration.

Appropriation. The total amount of the several appropriations for the use of the department during the year ending November 30, 1926 was \$353,340. The expenditures amounted to \$326,858.88, leaving an unexpended balance of \$26,481.12, in addition to which there was reserved for outstanding bills an amount estimated at \$2,163. There has been collected in fees and paid into the Treasury of the Commonwealth through the Division of Standards the sum of \$78,148.65. If this amount were deducted from the total expenditures the net cost of the Department to the Commonwealth would be \$248,710.23.

E. LEROY SWEETSER,

Commissioner of Labor and Industries.

FINANCIAL STATEMENT FOR 1926

GENERAL

<i>Account</i>	<i>Appropriations</i>	<i>Expenditures</i>	<i>Unexpended Balance</i>
Officials	\$20,500 00	\$20,500 00	—
Personal services	257,240 00	240,655 25	\$16,584 75
Contingent and travel	72,600 00	64,320 73	8,279 27
Wage Boards	3,000 00	1,382 90	1,617 10
Totals	\$353,340 00	\$326,858 88	\$26,481 12
Collected in fees and paid into the treasury of the Commonwealth			\$78,148 65
Collected in fees and paid into treasuries of cities, towns and counties of the Commonwealth			23,168 00

BY DIVISIONS

<i>Administration</i>	<i>1926 Appropriation</i>	<i>Expenditures</i>	<i>Unexpended Balance</i>
Commissioner, assistant commissioner, associate commissioners (personal services)	\$20,500 00	\$20,500 00	—
Clerical and other assistance to administration	4,440 00	3,650 00	\$790 00
<i>Division of Industrial Safety</i>			
Personal services	107,500 00	103,156 13	4,343 87
Expenses	26,000 00	25,656 82	343 18
<i>Board of Conciliation and Arbitration</i>			
Personal services	20,800 00	12,120 00	8,680 00
Expenses	5,000 00	3,853 55	1,146 45
<i>Division of Minimum Wage</i>			
Personal services	11,000 00	10,092 46	907 54
Expenses	3,400 00	2,292 03	1,107 97
<i>Wage Boards</i>			
Personal services and expenses	3,000 00	1,382 90	1,617 10
<i>Division of Standards</i>			
Personal services	26,000 00	25,670 00	330 00
Expenses	12,200 00	10,130 58	2,069 42
<i>Division of Statistics</i>			
Personal services	38,500 00	36,990 56	1,509 44
Expenses	11,000 00	7,920 48 ¹	3,079 52
<i>Public Employment Offices</i>			
Personal services	49,000 00	48,976 10	23 90
Expenses	15,000 00	14,467 27 ²	532 73
	\$353,340 00	\$326,858 88	\$26,481 12
			\$2,135 00
			28 00

¹ Not including outstanding bills estimated at

² Not including outstanding bills estimated at

REPORT OF THE DIVISION OF INDUSTRIAL SAFETY

JOHN P. MEADE, *Director*

INSPECTION WORK

In the administration of labor laws, the purpose is to protect the health and safety of employees. Through systematic inspection of industrial plants this is accomplished. Hazardous machinery exposure

is brought within control and industrial processes regulated. Supervising the laws relating to the employment of men, women and children is included. This work brings contact with employer and employee and affords opportunity for promoting co-operation with the labor laws. Each month a report is made to the Commissioner, with special reference to leading features of the work which may require his personal attention. During the year there was a total of 47,649 inspections and 12,068 reinspections.

SUMMARY OF ACTIVITIES

	All Estab- lishments	Manufacturing Mechanical	Mercantile
Number inspected	43,858	18,163	25,695
Number of employees:			
Males			
14 to 16 years	8,864	6,519	2,345
16 to 21 "	47,053	37,907	9,146
Illiterate	2,026	1,987	39
Over 21 "	518,291	443,301	74,990
	576,234	489,714	86,520
Females			
14 to 16 years	7,849	7,445	404
16 to 21 "	65,663	55,465	10,198
Illiterate	1,955	1,946	9
Over 21 "	262,843	220,814	42,029
	338,310	285,670	52,640

At the close of business November 30, 1925, there were 361 orders outstanding. During the present fiscal year there were 15,877 orders issued, making a total of 16,238. The number of orders complied with was 15,199, while those outstanding on November 30, 1926 totaled 1,039.

SUMMARY OF INSPECTIONS

The following statement indicates the activities of the inspection force for the year ending November 30, 1926:

Inspections

Mercantile, 25,695; mechanical, 18,163; building operations, 3,791. Total, 47,649.

Reinspections, 12,068.

Visits

Complaint, 2,201; accident, 1,929; occupational disease, 264; home-work, 252. Total, 4,646.

Total inspections and visits, 64,363.

Orders Issued

Labor: Employment of women and minors, 389; posting time notices, 4,340; minors in prohibited trades, 59; procuring and returning certificates, 4,117; total, 8,905.

Health: Sunday work, one day's rest in seven, 182; ventilation, humidity, dust removal, drinking water, 240; lighting, injury to eyes, toilet and washing facilities, etc., medical chest, 2,491; meal hours, seats, lockers, 80; total, 2,993.

Safety: Communication with engine room, 15; safeguarding machinery, 1,734; building operations, 2,091; general miscellaneous, 139; total, 3,979.

Total orders issued, 15,877. Total orders complied, 15,199.

Complaints

Minors: Employed under fourteen years of age, 17; employed without certificates, 31; employed in prohibited trades and on dangerous machinery, 7; illegal public exhibition of children, 18.

Health and sanitation (impure drinking water, failure to provide lockers, inadequate toilet facilities, etc., no seats for women, inadequate or no blower system), 124.

Time notices: Not posted, 10; at time other than stated, 1.

Overtime employment: Women and minors, 372; public works, 10.

Non-payment of wages, 1,947; illegal advertising, 6; unguarded machinery, 7; building operations, 34; general, 22. Total, 2,606.

Licenses granted for homework, 214. Registration of painters, 1,191. Wages paid by employers after complaint, \$28,704.63.

INDUSTRIAL SAFETY

During the year, 1,999 orders were complied with safeguarding movable parts of machinery which in the opinion of the Department were dangerous to employees. These included belts, pulleys, shafting, in-running gears, sprockets, clutches, set screws, couplings and collars and other parts of power transmission equipment. Careful attention was given to the control of hazards at the point of operation. The largest number of permanent partial disability injuries comes from this source. In the manufacturing centers, this constitutes the leading inspection problem. Intensive study of special cases was made by Chief Inspector Dexter, and improvements made in existing methods.

Work of this kind was done with laundry machinery manufactures relative to the use of interlocking devices on extractors. Devices of this type may be applied to both electrically-driven and other machines. These prevent the opening of the extractor cover while the machine is in motion and its starting while the cover is raised. Orders were issued to install this equipment where machines were found without it.

Paper manufacturers manifested interest in providing better safeguards on calender machinery. The experience of the Department was placed at their disposal and work places made safer for employees. Machinery of this type in rubber manufacturing establishments was given special attention. Suggestions made to improve the devices used for the prevention of accidents were adopted by employers.

In the leather finishing trade installing better equipment on embossing machinery was a prominent feature of the work done. Equipment to prevent the hands from entering the danger zone was required.

Structural weaknesses in ice houses were repaired and working platforms made safe as the result of verbal orders given by inspectors.

Stone-crushing machinery was inspected and orders complied with to provide adequate railing or barriers around dangerous places. Inspection of such equipment showed a common practice of permitting loose end shafting to project beyond the framework of the building. The fencing of machinery was found in some cases to be of faulty construction. These conditions made work places unsafe. This situation was corrected when the Department directed attention to these dangers.

Safe control of drop hammers was systematically urged. Plants where these machines are used were frequently inspected. Devices to keep the hands of the operator out of the danger zone when the hammer is released were found to be the best means to prevent injury. This system provides automatically for proper regulation and control of the treadle movements and is recognized generally as the best means of making the operation of the machine safe. Many concerns engaged in operating these machines co-operated with the Department in providing devices of this kind.

In mercantile establishments, motor-driven meat-grinding machines were carefully investigated. Many were found lacking adequate safe-

guards. Feeding the material with the hands was the frequent practice of the operator instead of using an implement generally supplied for this purpose. Devices to restrict the diameter of the intake were advised on these machines as an improvement upon the old method and the best practical means to prevent danger. New machinery constructed according to this suggestion was placed on the market by one manufacturer, following correspondence with the department. The attitude of concerns approached for this purpose was one of willingness to work out a plan for the control of a recognized danger.

A similar experience arose from an effort to establish better control of motor-driven doughmixing machinery. Improved automatic equipment for guarding this machine appeared on the market. Its installation in bakery establishments was urged by the Department.

Existing equipment to control milling machinery was closely examined, especially the safety stops used for this purpose. Tests were made of magnetic brake stops to determine their efficiency. Hazardous machines used in the wood heel manufacturing business received attention. No devices for the protection of employees were installed in the early period of their use. Accidents on these machines usually resulted in loss of fingers, followed by long periods of incapacity. By means of a locking device, the danger in operating was diminished, and the severity of injury reduced. The machinery hazards in this industry are now well controlled.

This close attention to machinery conditions is reflected in the reduced number of industrial injuries in this connection. The figures given below indicate this. For the years ending—

	<i>June 30, 1919</i>	<i>June 30, 1925</i>
Total number of machinery accidents	18,490	7,961
Injuries at point of operation	14,764	5,333
Accidents caused by belts	711	320
On gears	702	246

Many orders were issued dealing with defective floor conditions, bad stairways and failure to provide suitable railings. This was also true with regard to providing trap doors or self-closing hatches on openings and hoistways, hatchways and well holes in factory buildings.

It will be noted that 3,791 inspections were made in connection with building operations. This work resulted in compliance with 2,071 orders of the Department requiring the removal of hazards on stagings, platforms and other equipment in the construction and repair of buildings. Among the hazards found were hoistways and floor openings not adequately protected, and no provision made for safety rails on scaffolding and staging. These conditions were responsible for many industrial accidents. They were promptly corrected when orders were issued by the Department. The accident experience of 1925 shows that the largest number of lost-time industrial injuries occurred among employees in the building trades. The difficulties incidental to making the work places safe for workmen in such employment are well-known. In manufacturing establishments, the work done is almost the same day after day; in the building industry, conditions are constantly changing. The shifting of the working force on the job is a contributing factor to accidents. In one building under construction in the past year, sixty-nine sub-contractors were engaged in the work. Inspection of working platforms was made with the appearance of each succeeding group of workmen. The attitude of the legitimate building trade contractors is encouraging. They are willing to co-operate with the Department. Prosecution is seldom necessary with employers in this group. The offenders are usually of the type limited in means and experience. They bring small groups of workmen into buildings to do construction work without thought of their protection against injury. This presents a great obstacle to safety work.

On January 1, 1926 the Revised Rules and Regulations Pertaining to the Painting Business became effective. The experience with their enforcement in the past eleven months has been gratifying. These regulations now provide that guard rails must be used when the bed of the staging is 26' or more above the ground. Where the distance is less than 26' from the bed of the staging, either a guard rail, rope or other device may be used to protect employees from falling. Hooks used to support the staging must be of wrought iron and equal in strength to hooks of not less than $\frac{7}{8}$ " diameter. Supporting devices must be secured to some stable part of the building or structure. Workmen on a swinging stage or a boatswain's chair 26' to 50' above the ground must be provided with a life line, and above 50' with a life line and belt securely fastened and adjusted by him to his body and strong enough to bear twice his weight. The life line must be secured independently of staging. If supporting devices are attached to or supported by gutters, they must be secured independently by a tie-line. This provision is superior to any requirement in the old rules for the prevention of accidents to workmen. It deals with a hazard responsible for many fatal injuries. Experience in this industry indicates that a large percentage of accidents is due to suspending hooks on gutters without other support for the staging. Concerns well established in this business have provided their employees with this protection. There were eleven hundred and ninety-one (1191) contractors registered during the year. The enforcement of these Rules in the past eleven months indicates that much progress has been made in protecting the lives of employees. Special attention was given to restricting the employment of children to safe work places. There were 43 orders issued and complied with when children in the fourteen to sixteen-year age group were found working at prohibited trades or in proximity to hazardous machinery. In sixteen cases, minors under eighteen years of age were found working at occupations prohibited by law. This was stopped when orders were issued by the Department. Systematic inspection of employment places was continued. Plants with accident records were given semi-annual examination.

INDUSTRIAL HEALTH

Close attention was given by the inspection force to conditions relating to the health of employees. These included the proper ventilation of workrooms; adequate lighting facilities; toilet and washing provisions; installation of equipment for the immediate treatment of persons injured or taken ill on the premises; providing pure drinking water; regulating humidity and furnishing women and children with suitable seats when work could be properly done in a sitting position. The problem of dust, fumes and gas removal was stressed during the year. Conditions that required better localized exhaust ventilation were given careful attention by the chief inspector.

Handling toxic agents frequently is the beginning in diseases of occupation. Washing the hands thoroughly and often is a recognized means for prevention. Especially is this practice necessary before eating.

During the year, 2,993 orders were issued requiring the removal of conditions harmful to the health of employees. Of these, 1,418 orders established compliance with the Rules and Regulations for Toilet and Washing Facilities in Industrial Establishments. These requirements are closely related to health, particularly in places where employees are engaged in manufacturing processes which involve the use of poisonous substances. When this hazard is present, or when the work done is especially dirty, clean running hot and cold water is required. In modern plants such facilities are usually maintained. The responsibility for keeping toilets and sinks in a sanitary condition is generally as-

signed to some competent person. Conditions are nearly always creditable under this system.

In many tenant factory buildings, the reverse of this situation is frequently met. These buildings are usually of old construction and occupied by many concerns, each having a small number of employees. The duty of keeping toilets clean is usually in charge of a janitor, who has general care of the entire building. This arrangement is often a contract provision in the tenant's lease of the premises. This system is not satisfactory. Under these circumstances there is little to encourage employees to co-operate in maintaining sanitation. Nearly all the orders issued by the Department in this connection fall on this class of establishments. Practically all prosecutions for violation of Toilet Rules and Regulations concern them. Complaints of this character from the public usually are directed to these concerns. Much time of the inspector is given to enforcing privacy and cleanliness in such places.

First aid treatment for persons injured or becoming ill on the premises of industrial establishments received careful consideration. To treat burns, cuts, bruises and lacerations promptly means preventing infection in many cases. The assistance given is useful in averting incapacity and reducing the severity of injury to employees. Inspection supervision of rooms used for this purpose was maintained and requirements enforced according to the Rules and Regulations. The record of cases of accident and sickness treated in the first aid room is available to the inspectors of the Division. The information received from this source is often an index to the danger zones of the plant. It frequently points to the inspector certain existing conditions needing correction. Many of the 719 orders issued in this connection were for the replenishing of supplies for the medical or surgical chests required in establishments where there are less than one hundred persons employed.

The history of infection injuries in the industries of the Commonwealth shows that 1923 was a peak year. In 1921 they reported one out of eleven; in 1922, one out of ten; in 1923, one out of nine; in 1924, one out of ten; in 1925, one out of eleven.

While the number of infected injuries has decreased, a larger number of deaths and of permanent partial disability cases than in previous years was attributable to this cause in 1925. In this year, 31 fatal injuries and 81 permanent partial disabilities resulted from this cause. Inspectors have stressed the need of adequate first aid treatment as a means of preventing infected injuries.

LIGHTING

Enforcing the provisions of the Lighting Code was continued during the year. Two requirements in the code have close relation to the health of employees. In occupations where concentration on fine work is necessary, adequate lighting and prevention of glare is essential to prevent interference with vision and eye fatigue. Proper distribution of illumination, with good entrance and exit lighting, promotes the comfort of employees and is a precaution against personal injury.

There were 301 orders issued requiring improvement in lighting conditions in the plant. In addition to these, 53 orders were issued in cases where it appeared to the inspector, from the nature of the work or the machinery used or other circumstances, that there was danger of injury to the eyes of employees. These included requiring a mechanical device or some other practical means other than the use of goggles to prevent injury.

VENTILATION

In plants where the local or general ventilation did not meet the requirements, 198 orders were issued. It was found necessary in certain

establishments to improve the existing equipment used for the removal of dust, fumes and gases at the point of operation. Many of these cases concerned danger to the health of persons employed in celluloid covering of wood heels and in operating surface-grinding machinery in granite-cutting establishments and other places where industrial processes cause the escape of dust, fumes and gases into the workroom. The law relative to the ventilation of factories and workshops was amended by the Legislature of 1926. Chapter 159 of the General Acts of that year amended Section 117, Chapter 149 of the General Laws, so that the statute in this connection now reads as follows:

"In a factory where five or more persons and a workshop where five or more women or children are employed shall, while work is carried on therein, be so ventilated that the air shall not become so impure as to be injurious to the health of the persons employed therein."

"A factory or workshop where more than one such person is employed shall be so ventilated that all gases, vapors, dust or other impurities injurious to health, generating in the course of the manufacturing processes or a handicraft carried on therein, shall so far as practicable be rendered harmless."

This enabled the Department to extend its work on a larger scale in factories and workshops where a small group of persons was employed. These places included metal-polishing concerns, granite-cutting establishments, the making of storage batteries and other places where dust control through exhaust equipment is essential to protecting the health of employees.

Escaping fumes from a running motor in a small garage frequently liberates carbon monoxide gas into the enclosure. Exposure to this condition leads to a chronic poisoning frequently manifesting itself in various symptoms. In some cases death occurs quickly. Control of this danger at the origin and keeping the workrooms free from gas accumulation is the means of protecting the workmen. Special cases of this nature were given attention by the chief inspector and provisions made for better exhaust equipment. Orders issued for this purpose were promptly complied with.

OCCUPATIONAL DISEASE

There were 254 cases of occupational disease investigated during the year. These included 242 men and 12 women. Five cases—all men—resulted fatally.

One man died from the effects of carbon monoxide poisoning. In this case the employee was in a storage room chalking the floor space and planning for machinery. His automobile was in the enclosure with the motor running. Apparently unconscious of the danger, he was overcome suddenly by the escaping gas and died.

The second death resulted from nitrous gas poisoning. This employee worked for a firm engaged in the manufacture of fertilizer. Part of the plant was used for making sulphuric acid. The employee had worked as a helper on lead burners for many years; and in this instance went into a 26-inch pipe in connection with his work. Here he encountered strong fumes, causing suffocation. Investigation made by the inspector showed that in this plant employer and employee were well aware of the hazardous nature of the work. A well-organized safety committee was found to be in operation. Employees were advised what to do when affected by nitrous acid fumes. Respirators were provided. Special treatment was available to counteract the effect of such poisoning.

Two fatal cases of hydrogen sulphide poisoning were investigated. The men in question were employed by a concern engaged in the manufacture of oil. It was their duty to measure the amount of product in tanks used in the process of distillation. While doing this, one of the

employees was overcome by hydrogen sulphide fumes escaping through a small trap opening two inches in diameter, which caused his death. His associate went looking for him and met the same fate. Both were found lying on top of the tank overcome by the fumes. It was estimated that the operation resulting in the death of these workmen had been repeated three hundred thousand times in the six previous years, without a history of industrial injury. Records on file in the Division show that two inspections had been made the previous year in this place, and that respirators and other means were provided to prevent the inhalation of fumes. These were not used by the employees.

The other fatal case was caused by anthrax. Reference in detail is made to this below.

There were 231 cases of industrial disease investigated in manufacturing and mechanical establishments. Classified by diseases these were as follows: Lead poisoning, 79; dermatitis, 57; tuberculosis, 11; gas poisoning, 22; chrome poisoning, 16; industrial eczema, 14; anthrax, 10; acid and oil fumes, 8; dust in lungs, 7; benzol poisoning, 4; cyanide poisoning, 2. The industries represented are textiles, shoes, paper, chemical, metal, rubber, foundry, tannery and wood-working plants.

Lead Poisoning: This is the most common occupational disease. It occurs in many employments. A total of 79 cases were investigated. None of these was fatal. They occurred among men employed in rubber mills, foundries, smelting works, printing establishments; as automobile body makers, house painters, spray painting in cars, in building tanks and making batteries. Fifty-one (51) were in mechanical establishments: 14 in foundries, 5 in rubber mills; 5 in the metal trades; 4 were in other miscellaneous types of employment. In each case report was made to the Department by the attending physician as required by law. The place of employment was carefully inspected and correction made if conditions found did not meet with the requirements of the law. In many cases orders were issued to provide suitable washing facilities, including running hot water, adequate exhaust systems at the point of origin, to replenish medical chest, and to require the use of respirators, masks and other means to prevent inhalation of lead fumes or dust. Examination of paint-spraying apparatus was a prominent part of this work. Better protection of such spraying machine operators was found necessary in some cases. These changes were made on verbal orders from the inspector.

Anthrax: There were 10 cases, one of which proved fatal. Frequent inspection of tanneries and workrooms where wool sorting is done is the practice of the Department. It is one of the best means for preventing the development and spread of this disease. This policy was continued during the year. Handling imported hides frequently means exposure of employees to contact with anthrax germs. Methods employed to do this work must be designed to control this danger. It is here that constructive advice of inspectors accomplished good results. Through the recommendations, gloves, boots and aprons and other measures were provided for protection of employees engaged in this work. Employees in these establishments are watched carefully for slight punctures or abrasions of the skin or other physical conditions which may provide the foundation for anthrax infection. Medical attention is available and plant physicians are in constant attendance in the larger concerns.

In textile establishments there were four (4) cases of anthrax. These involved employees working at wool sorting. One of the cases was fatal. This employee worked in a six-story building, five of which were used principally for storage purposes and the top floor used for wool sorting. This room contained 6000 square feet. The distance from floor to ceiling measured 18 feet. It was ventilated by thirty-three windows and a monitor roof with sixty windows which could be opened or closed in series. In addition there were two 4-foot fans in the floor, placed about one-third the distance from each end of the building. Wool received in this room

came from Asia, Persia, India, China, Turkey, Egypt, Spain, Portugal, South America and South Africa. About 10,000 pounds were sorted daily by twenty or twenty-two employees. The wool came wrapped in a burlap bale, weighing about 330 pounds. Each sorter worked at a device 13 feet long and 4 feet wide, under which a box was placed to collect the dust falling through. Wooden and wire partitions separated each device from the adjoining ones and were ventilated by two windows. This employee worked in proximity to a 4-foot exhaust fan in the floor. Great care was exercised in this establishment to control the dust hazard. The medical history in the case indicates that no skin abrasions were found. In the autopsy the medical examiner discovered abscesses in the lungs and diagnosed the case as pulmonary anthrax.

Two other cases developed in the same establishment, in which each employee was incapacitated for a period of four weeks. These were the first cases of anthrax in the plant since it began operations forty-two years before. Frequent inspection had been made, and records on file in the Division indicate that the requirements for the protection of health had been complied with.

In another case the employee worked in the picking room of a woolen mill. His duties consisted in opening and mixing different lots of cattle hair and helping to feed it in the picker. The concern contracted with a Chicago firm for one million pounds of this material each year. Suggestions were made to the concern regarding the need of improved methods in storing the hair in a shed used for this purpose, and orders issued for this purpose complied with. The employee who was infected was incapacitated for a period of six weeks, and at the end of that time returned to his ordinary duties. This was the first experience of the firm with anthrax.

Dermatitis and Industrial Eczema: Investigation was made in 57 cases of dermatitis and in 14 cases of industrial eczema. These diseases developed largely from handling dyes and dyed cloth and from contact with dust, oils and acids. These included copper dust and cocobola wood dust; sulphuric muriatic and cyanide acids; mineral, lubricating and cutting oils; creosote. The diseases also resulted from handling impregnated paper covered with black varnish in which denatured alcohol and benzol were used. They were found among fur workers; brass polishers; automobile repairers; cable splicers; nickel polishers; and among persons handling cocobola wood, oiling machinery, taking hides from lime baths, sorting skins, finishing chrome leather, seasoning hides, and workers in contact with lead. Time lost from work in these cases averaged between ten days and two weeks. The usual plan of inspection of work places was followed in connection with these cases. Suggestions were made as to better control of materials used. Improvements were made in providing running hot and cold water and other means to protect employees. Orders issued for this purpose were promptly complied with.

Gas Poisoning: There were 22 cases of gas poisoning investigated. Among the employees affected were plasterers in buildings where salamanders were used; men employed in mixing sulphur in smelting kettle; metal platers inhaling nitric and sulphuric acid fumes; laborers in cleaning out tanks used in the manufacture of sulphuric acid; workmen employed in the manufacture of chemicals; in the bleaching and finishing of cotton cloth, inhaling chloride gas which caused irritation of the lungs and throat; and in repairing storage batteries and in oil refining.

Chrome Poisoning: There were 16 cases of chrome poisoning investigated. Most of these occurred in tanneries. Failure to wear rubber gloves, which were provided to protect the hands of employees, was a factor in many of these cases.

Among the miscellaneous cases were 11 in which tuberculosis was alleged. Of these 8 were in the granite-cutting industry. The others were sandblasters and employees in metal-polishing establishments. Other

occupational diseases investigated included 4 cases of benzol poisoning in plants engaged in finishing artificial leather.

EMPLOYMENT OF WOMEN AND MINORS

The enforcement of the laws dealing with the hours of labor for women and minors was systematically carried on during the year. Inspections were made in 43,858 manufacturing, mechanical and mercantile establishments and 8905 orders were issued dealing principally with the laws requiring posting time notices and procuring and returning employment certificates, posting list of minors, and procuring and returning educational certificates. An explanation of these orders follows.

Posting time notices has its special problems. Many firms have these notices framed under glass and placed in each workroom. As a result of this precaution and care, they are preserved for continual use. If the hours of labor are changed in the establishment to meet some lawful exigency, other notices are secured and used temporarily. In the numerous small mercantile establishments, this practice is not followed. The time notice is often attached carelessly to the wall and is soon torn or unfit for use. In some plants where women are employed in different rooms, time notices may not be provided for each. These conditions lead to the frequent issuance of verbal orders to post the notice. Inspectors are required to carry the notices with them to the places of employment and render necessary assistance in posting them correctly. The total number of orders issued in this connection was 3,854, of which 3,283 were verbal instructions given when the inspection was made.

There were 149 orders issued to provide posting shift notices, including keeping proper list of shifts on file. Of these 89 were given verbally. There was no indication of overtime employment in the places involved.

Several thousand orders are issued each year for procuring and returning certificates. There was a total of 654 orders issued and complied with requiring that employment certificates be secured or returned, or that the complete list of the name and age of children under 16 be conspicuously posted near the principal entrance of the building. Very few of these children had been released from school for employment. They should have been certified for part time work during certain hours when the schools were not in session. The Department issued 3,387 orders on failure to have on file educational certificates for employed minors between sixteen and twenty-one years of age, or to return them to the office of the superintendent of schools when the employment ceased.

NIGHT EMPLOYMENT

Several times during the year investigation was made of the night employment of women and minors. This meant visits to the same establishment both when the day shift and when the night shift was employed. Some difficulty was encountered through the practice of certain women working in one establishment during the day and in another at night under an assumed name. This required much time in checking up statements made by employees in cases where prosecution was necessary. In mercantile establishments girls under twenty-one years of age were frequently found working after 10 o'clock in the evening. This was corrected when the requirements of the law in this connection were made clear to employers. Factories operating at night, and employing both sexes, were given frequent inspection.

PROVIDING SEATS FOR WOMEN AND CHILDREN

In every manufacturing, mechanical and mercantile establishment suitable seats must be provided for women and children when they are not engaged in the active duties of their employment. They must also be permitted to use the seats while at work except when the work cannot be properly performed in a sitting position. There was no objection en-

countered in the inspection work to providing suitable seats for these employees when they were released from their active duties. In a few cases adjustment was made when it was claimed that work could not be done in a sitting position. It was necessary to issue 45 orders for seats. The co-operation given indicated a willingness to comply with the provisions of the law.

LUNCH PERIOD FOR WOMEN AND CHILDREN

The lunch period for women and children in factories and workshops was checked by the inspectors. The law requires that an interval of at least forty-five minutes must be provided for this purpose in such places. It was only necessary to issue 23 orders regarding this provision, and these were promptly complied with.

CHILD LABOR LAWS

Close supervision was maintained over places where violations of the child labor laws occurred. These included chain stores, public bowling alleys, theatres and similar places. In the summer months, beach resorts and amusement parks were inspected for this purpose. Among the places visited were Nantucket, Martha's Vineyard, Cape Cod,—including Marshfield, Scituate, Plymouth, Nantasket, Hull,—with places along the North Shore in Marblehead, Gloucester, Salem, Lynn, Nahant and Revere. Conditions under which children were employed in all summer parks in other parts of the State were closely examined. Supervision of these places resulted in protecting children from harmful types of employment. This work brought a better understanding of the law to those engaged in business at summer resorts. Complaints in this connection have been reduced. Children are rarely found now employed in these places in proximity to hazardous mechanism used in the operation of pleasure devices. Few prosecutions were necessary. Vigilance was exercised in preventing the illegal employment of school children. These included boys delivering milk to customers for truck drivers in the early hours of the morning. Loss of sleep and rest on the part of these children unfitted them for their school work. This type of employment was not confined to large cities, but was found in smaller communities.

In one case a boy twelve years of age, while employed before 6:30 in the morning, fell under the wheels of an automobile truck and sustained a fatal injury. Another case was that of a boy thirteen years of age who attended school regularly, but was employed illegally between the hours of four and six o'clock in the afternoon. In the course of his work he went from one floor to another in the same building on errands for his employer. He was found crushed between the floor of the elevator and the wall. The accident was a fatal one. The most tragic consequences of illegal child labor resulted in these cases. Prosecution was immediately entered in the court in each instance and the employer found guilty and fined.

Co-operation was maintained during the year with agencies organized to prevent the illegal employment of children. Co-operation with police department in cities and towns was effective in this connection. In the large cities in the State, patrolmen on night and early morning beats were ordered at roll call in the station house to watch closely for violation of the child labor laws. Court action was successful in many cases through assistance given in this manner. Superintendents of schools, attendance officers and directors of continuation schools were in close touch with the Division, conveying information regarding violation of child labor laws.

INJURIES TO EMPLOYED CHILDREN

Study was made of the fatal and permanently disabling injuries to children in the fourteen to eighteen-year age group as reported to the In-

dustrial Accident Department for the year ending June 30, 1925. This constituted the most recent information available for this purpose. Approximately 400 temporary disability cases in this age group were analyzed. Most of these injuries were slight, report being made to the Industrial Accident Department in compliance with the law.

These injuries to children between the ages of 14 and 18 years for the year mentioned were 2,497. These are classified as follows:

<i>Age</i>	<i>Number</i>	<i>Boys</i>	<i>Girls</i>
14 years	115	95	20
15 "	616	552	64
16 "	1,050	888	162
17 "	1,716	1,505	211

The 62 permanent partial injuries to minors under 18 years of age, are classified as follows according to sex and age:

<i>Age</i>	<i>Boys</i>	<i>Girls</i>
13 years	1	—
14 "	1	—
15 "	4	—
16 "	22	7
17 "	22	5

All of these accidents were investigated.

Of the six fatal accidents to children under 18 years of age, one was a boy 14 who was struck by an automobile truck on the street while employed in the delivery of messages. Another boy, 16 years of age, in walking through a locomotive shop on an errand, went under a moving crane which collapsed, and 2140 pounds of metal fell on him, crushing him to death. Three boys and one girl seventeen years of age were included in the fatalities. One of the boys was employed as a carpenter's helper and was standing on crossbeams, taking timbers as they were handed up to him. He lost his balance and fell backwards, striking the concrete floor on the back of his head, sustaining a fractured skull. Another boy was suffocated in a sandbank; and one was killed by a falling tree. The girl was employed in handpainting greeting cards. Her fingers became infected and finally caused her death.

All of the six children under sixteen years of age who sustained permanent partial disability injuries were boys. This was the smallest number of such injuries in this age group in any year known in the history of the Commonwealth. These included an elevator accident in which a child suffered injury to his right foot and two toes were broken. Another, while attempting to operate a washing machine, sustained a bad laceration of his finger and amputation at the first joint. One had his finger caught between rolls on a ribbon lapper, and lost the use of the distal phalange of the right index finger. Another had his arm broken in cleaning machinery while in motion. In the two remaining cases lacerations became infected, causing loss of the use of index finger. These cases are classified as follows by the industries in which they occurred:

Textile	2
Shoes	1
Reed manufacturing	1
Metal	1
Print works	1

Division records show that the plants where these injuries occurred had been given regular and systematic inspection previous to their occurrence. Machinery in general was found well safeguarded. Certificate requirements were complied with.

There were 56 permanent partial injuries to children 16 and 17 years

of age; 44 were boys, and 12 were girls. Accidents by industries were as follows: Textile, 16; metal, 9; shoe and leather, 7; printing, 2; foundry, 2; rubber, 1; paper, 1; building trades, 1; wood-working, 5; miscellaneous, 12. In 48 of these cases there was a permanent partial disability or loss of use of the index finger or thumb; 5 lost the use of two or more fingers. Practically all of these accidents were at the point of operation on machinery. Two lost one or more toes, and one lost the vision of one eye. Investigation in the plants where these accidents occurred indicated general compliance with provisions required by law. First aid treatment was at the disposal of employees in these places.

In some cases infection of slight injuries was followed by amputation or loss of use of the injured member. Lack of machine experience continues to be a factor in the cause of injuries of this type. Failure to coordinate the hand and mind was an element in many cases. Investigation of these injuries was made the occasion for inspectors to suggest proper supervision of minors on machinery. The information derived from these investigations was frequently made the object for correspondence with directors of continuation schools. Through this means many children in the fourteen to sixteen-year group had presented to them accident histories which emphasized the importance of exercising care in their employment.

ACCIDENT PREVENTION

Reporting industrial injuries is an important part of any system for the prevention of accidents. From this source must come the information necessary to accomplish practical results. It is essential to know how, when and where accidents happen. Accident investigation is an educational process. It acquaints the inspector with the danger places in industry and equips him with expert knowledge in dealing with this feature of his work. It is provided in Section 19, Chapter 152, of the General Laws, that copies of reports of injuries filed with the Department of Industrial Accidents, and all data therefrom, shall be kept available and furnished on request to the Department of Labor and industries. These reports are carefully examined by a clerk in this Division who copies the information given in the following types of injuries: fatal accidents; all permanently disabling injuries; occupational diseases; accidents to minors under sixteen years of age and to those between sixteen and eighteen if the information indicates that employees work at processes prohibited by law.

The cases are then assigned to an inspector who investigates the place of employment and determines the extent of hazardous exposure, interviews the employee and the management and then files report with this office. The information received is entered on a questionnaire blank which includes the occupation of the employee, the name of the machine, if the accident was on a machine, and the address of its manufacturer. It also contains space for record of safeguards provided and used, also a description of work done to prevent accidents, and whether a safety committee is in active operation or mechanical engineer is engaged to do this work in the plant. It calls for reports on accident experience in the establishment during the year and the type of facilities for first aid treatment to persons injured or taken ill upon the premises. Description in detail of how the accident occurred is required.

The information secured is frequently made the basis for further action. This may include correspondence with manufacturers of machinery, directing attention to the need of constructing new devices to prevent the recurrence of a similar accident. It may require the issuance of orders by the Department to control dangerous points of machinery contact or suggestion of means for the prevention of non-machinery accidents. Under this system, uniform work in treating with the cause of industrial injuries is maintained. Improving methods to safeguard the point of operation is made possible. Guards are often found in use that

do not adequately protect the operator from injury. This is especially the case in establishments operating wood-working and punch press machinery. Special cases of this kind occupied much time of the chief inspector during the year. The cost of experimenting with improved devices has been generously met by many concerns in the hazardous trades.

Accident cases were investigated in 1131 manufacturing, mechanical and mercantile establishments. Of the employees concerned, 951 were men and 180 were women.

The manufacturing establishments visited in this connection included 294 textile mills, 135 metal products establishments, 94 wood-working shops, 53 paper mills, 33 foundries, 38 tanneries, 31 rubber mills, 53 shoe factories, 150 miscellaneous factories. There were 197 accidents investigated in mechanical establishments. These occurred in laundries, bleacheries, dyeing and cleansing establishments, electric and gaslight plants and print shops. Investigation was made in 53 cases in mercantile establishments.

The severity of injuries in these cases in manufacturing, mechanical and mercantile establishments were as follows:—fatal, 54; amputation or loss of use of member, 397; (this includes loss of fingers, hands, limbs and sight of eyes), abrasions, bruises, cuts and lacerations, 411; burns, scalds and concussions, 45; dislocations, fractures, sprains and strains, 168; other types, 58.

Two hundred and twenty-nine (229) accidents in the building trades were investigated. These were all men. The nature of injuries were: fatal, 37; amputation and loss of use of member, 9; abrasions, bruises, cuts, lacerations, 75; burns, scalds, 5; dislocation, fracture, sprains and strains, 92; other types, 12.

In the transportation industry, 13 cases, all of men, were investigated. The accidents occurred on the premises of industrial establishments. The types of injuries were fractures, cuts, punctures, abrasions and contusions.

Eye injuries were given careful attention. Investigation was made in 126 cases—121 men and five women. Of these injuries 116 were sustained in manufacturing, mechanical and mercantile establishments. These included: textile, 16; metal trades, 40; foundry, 19; wood-working, 6; tannery, 2; paper, 2; shoes, 2.

Of the eye injuries, 27 occurred in laundries, bleacheries, dyeing and cleansing, electric and gas light plants and print shops; 2 in mercantile establishments, and 3 in the building trades. Seven were in miscellaneous establishments. The degree of severity in these injuries, was: loss of sight, 35; loss of an eye, 10; foreign body in eye, 50; burns and scalds, 8; irritation, 17; cuts and punctures, 5. The cause of injury was carefully investigated by the inspector in each case. Frequently the information secured was placed at the disposal of safety committees in the plant. This system accomplishes much in maintaining active interest for the prevention of accidents in the industries of the Commonwealth.

EMPLOYMENT ON PUBLIC WORKS

The statutory regulation of employment on public work includes the provision for the 8-hour day, the citizen's preference law and the customary and prevailing rate of wages act for mechanics and teamsters employed in the construction of public works. There were 10 complaints alleging violation of law in these matters, the smallest number in any year in the history of the Department. In some of these cases, school janitors in certain cities alleged they were employed in their duties more hours than required by law. It is provided in Section 30, Chapter 149 of the General Laws, that the service of all laborers employed by the Commonwealth or any city or town shall be restricted to 8 hours in one day and to 48 hours in any one week except in cases of extraordinary emergency. No officer or other person of a city or town, whose duty it is to

employ, direct or control the services of laborers, shall permit them to exceed these hours in employment. Janitors are included in these provisions. The Supreme Court has ruled in the White case, reported in 226 Mass., page 517, that in the case of janitors, whose principal duties bring them within the class defined as laborers, workmen and mechanics, if they are employed in cleaning, heating, washing windows, care of yards, sidewalks and lawns, and in some cases running steam boilers, their status is that of a laborer and a mechanic. When these facts were made known to school officials, they complied with the statutes regulating the hours of work for such employees.

Several of the complaints alleged violation of the 8-hour law where laborers, workmen and mechanics were employed in the construction of public roads. Investigation showed that in nearly every instance an extraordinary emergency justified the employment of men overtime. When these conditions did not prevail, prompt action was taken to secure compliance with the law. Frequent conferences were held when projected street construction work involved questions of danger to property, life, public safety and public health. Employees were given opportunity to present their views in these cases. Decisions made by the Commissioner were readily adopted. This arrangement did much to promote better understanding of the statute and reduce the number of complaints.

In one case the office was notified that nine men were employed in a municipal stable on three 8-hour shifts for a total of 56 hours per week in feeding, cleaning, bedding and the care of horses. When the official in charge was informed that such work came within the provisions of Section 30, Chapter 149 of the General Laws, the hours of labor of these employees were restricted as required by statute to 48 hours in a week.

In pursuance to complaints filed with the Department, investigation was made in two cases alleging that the customary and prevailing rate of wages was not paid to mechanics employed in the construction of public works. These included work done by carpenters, plumbers, steamfitters, painters and electrical workers. It was found that a dispute existed in each case, and in accordance with the provisions of Section 27, Chapter 149 of the General Laws, the rate of wages was decided by the Department. One of these cases concerned an addition to one of its institutions by a State department. The other was in connection with bridge construction work. There was only one complaint alleging violation of the law requiring that citizens be given preference in employment as mechanics, teamsters or laborers in the construction of public works. This was promptly corrected when the requirements of the law were explained.

WEEKLY PAYMENT LAW

The Department of Labor and Industries is authorized by statute to bring complaint against any person, firm or corporation who fails to meet the requirements of the Weekly Payment Law as defined in Sec. 148, Chapter 149 of the General Laws.

During the year, 1947 such complaints were received and made the basis for investigation by the Division. In that period the sum of \$28,-704.63 was paid to employees after this action was taken. Small amounts of money were generally involved in such cases. The law has proven useful in forcing payment of overdue wages to workmen, without an outlay of expense for Court action. This is a distinct service to the laborer with a family to support. Much of this work is directed to the Division by police departments, court officials, labor organizations and other agencies.

The present law does not specifically require the payment of wages in cash or forbid the issuance of checks for this purpose. During the year many large concerns changed from paying wages in cash to the method of paying wages by check. Several complaints were made to this office, alleging that this practice did not meet all of the requirements of the

law. It was held that the payment of wages under this system in many cases would not meet the provisions of the statute requiring that wages earned by each employee should be paid to him "within six days of the date of said payment." Complaint was made that facilities were not available to cash the check and that the nature of employment in some cases would prevent this from being done until the eighth or ninth day after wages were earned.

It was found necessary for the Commissioner to request an opinion from the Department of the Attorney-General as to the legality of paying wages by this method. That part of the opinion received in this connection is quoted herewith:

"Although there is no obligation to pay in lawful money if the employee is willing to accept a check, the use of check, instead of currency, gives rise to the question whether, in each instance, depending upon the intention and conduct of the parties, the check was given and received as payment within the meaning of the statute. The employee, in my opinion, is entitled to be paid his wages in cash unless he agrees to be paid in some other medium."

"Answering your interrogatories, I am of the opinion, therefore, that payment of wages by check, if accepted in payment, tendered at time of payment and cashed on a later date, is not a violation of G. L., c. 149, s. 148; if not so accepted and cashed it is; that payment of wages by check is permitted under the provisions of G. L., c. 148, if the employee assents thereto; that payment by check is not a "valid set-off" under the provisions of G. L., c. 149, s. 150."

Persons appealing to the office for information concerning this system of paying wages have been advised in accordance with this opinion.

The jurisdiction of the Weekly Payment Law has been extended to apply to nearly all industrial establishments in the State. It also includes employees in theatres, moving picture houses, and dance halls. Every person employing musicians, janitors, porters or watchmen is now required to pay weekly each employee the wages earned by him. This extended jurisdiction has increased the work of the Division each year. Assistance under this law is given wage-earners who need it.

The branch offices located in Fall River, Lawrence, Worcester, Springfield and Pittsfield experienced an increase of work in this connection over former years.

LICENSES FOR HOME WORK

Every person hiring, employing or contracting with a member of a family holding a license for making, altering, repairing or finishing wearing apparel to be done outside his premises must keep a register of the names and addresses of the persons so hired, employed or contracted with and must forward a copy of such register once a month to the Department. These reports are filed for the use of the Division and provide a basis of contact with concerns engaged in this work. Through this means the provisions of law relating to the employment of women and children are made clear to such employers.

Many employers follow the practice of having the apartment of a prospective licensee investigated by a personal representative before deciding to give the applicant work. This does much to prevent the issuance of licenses that might not be used. It also provides assurance to the concern that the room to be used is in a sanitary condition and the employee a fit person to do the work. During the year ending November 30, 1926, there were 252 visits made in this connection and 214 licenses granted to persons doing work of this kind in an apartment, tenement or dwelling house.

COUNSEL'S OFFICE

During the year ending November 30, 1926, the Department prose-

cuted 197 persons on 404 complaints. Of this number there was a finding of guilty in 272 complaints; pleas of nolo were accepted in 2 cases; verdicts of not guilty were found in 39 cases; and 91 complaints were dismissed at the request of the Department Counsel. Of these, 89 were for non-payment of wages, in many of which wages had been paid before trial. Others were found to require civil action.

Summary of these prosecutions with the outcome and disposition of the same is given below:

Character of Offence: Minors—Employed under 14 years of age, 6; employed without certificates, 25; employed in prohibited trades and on dangerous machinery, 7; illegal public exhibition of children, 8; health and sanitation (impure drinking water, failure to provide lockers, inadequate or no blower system), 19.

Time Notices: Not posted, 7; at time other than stated, 32.

Overtime: Women and minors, 19.

Non-payment of Wages: 252.

Illegal Advertising: 2.

Building Operations: 20.

Labor General (fines, holiday employment, weavers' specifications), 7.

Total, 404.

Of the 91 dismissed counts—

89 were for non-payment of wages, in 37 of which wages were paid.

1 for employment without certificate.

1 for overtime employment.

Of the 39 not guilty counts—

18 were for non-payment of wages, in 5 of which wages were paid.

1 for employment in prohibited trades.

6 for employment at time other than stated on time notice.

2 for illegal advertising.

1 for hindering an inspector.

7 Painting Rules.

1 for employment without time notice.

1 for employment without certificate.

1 for overtime employment.

1 health and sanitation.

Wages paid by employers after complaint was made, \$28,704.63

DEATH OF INSPECTOR WALTER J. MURPHY

On January 19, 1919, after apprenticeship as a bricklayer and five years of experience as a building trade mechanic, Inspector Walter J. Murphy came to the Department. He died on January 16, 1923. His associates soon learned to appreciate his worth and were quick to acknowledge his efficient service to the Department. He was a veteran of the World War, a useful citizen, and the first inspector of the Division to die in active service.

FINANCIAL STATEMENT

	Appropriation 1926	Expenditures	Unexpended Balance
Salaries	\$107,500.00	\$103,156.13	\$4,343.87
Expenses and travel	26,000.00	25,656.82	343.18
	\$133,500.00	\$128,812.95	\$4,687.05

REPORT OF THE BOARD OF CONCILIATION AND ARBITRATION

EDWARD FISHER, *Chairman*, HERBERT P. WASGATT, SAMUEL ROSS.

On December 1, 1925, there were pending 50 joint applications for arbitration. During the year 219 joint applications were filed, making a total of 269. Thirty-six cases were settled, abandoned or withdrawn. Decisions were rendered in 201 cases and 32 applications are now pending. No petitions for certificates of normality were filed.

CONCILIATION.

As a result of another year's experience the Board is more firmly convinced that industrial problems involving differences between employers and employees, such as hours, wages and working conditions, are recognized by both parties as of mutual concern. This generally results in a willingness on both sides to take up these matters for discussion and consideration and to co-operate in reaching a determination as to what is fair and reasonable. This method is always recommended by the Board. Where such a course is followed opportunity is afforded for adjustment of differences by the parties themselves without cessation of work; and, if the parties are unable to reach an adjustment, for the Board through its good offices to assist them in doing so. The work of the Board along these lines has not only broadened, but has resulted in the advice and assistance of the Board being sought relative to the provisions and forms of agreements; and also in making arrangements between employers and employees whereby labor controversies can be adjusted without cessation of work. It has been demonstrated that under such arrangements opportunity has been afforded the employer to develop his business, resulting in advantage to all concerned.

In addition, the Board and its agent have been engaged during the year with the usual activities in holding conferences with parties and endeavoring through their good offices to settle labor controversies where there was a cessation of work. Several such controversies, involving in each instance a number of employees, have thus engaged the attention of the Board. On the whole the past year has shown that these controversies are less severe as well as fewer in number than in former years.

Cigarmakers, Boston. On April 7 a strike of cigarmakers in Boston occurred, their demand for an increase in wages being refused. About 1,600 employees were involved. After some time spent in conferring with the representatives of the employers and of the employees and making a careful survey of the situation, the Board on Wednesday, April 21, called a conference at its office between the representatives of the four larger manufacturers and a committee of the employees. The employers represented at the conference were as follows: H. Traiser & Co., Inc., Alles & Fisher, Inc., Elcho Cigar Company and the Silver Cigar Company. The employees were represented by a committee of seven, including the president of the local union. Two of its international officers were also present. At the request of the Board the parties presented their respective positions and a general discussion followed. The employees sought an increase in rates on the bulk of the work, varying with the different operations, contending that with the repeal of the Federal tax they were entitled to a restoration in part of the decrease in wages which they accepted in 1922. This the employers declined to grant, stating that they had not benefited directly by the repeal of the Federal tax as this was, as they expressed it, passed on to the retailer in a reduced price. This was not denied by the employees. The employers further contended that the lower price was needed in order to stimulate purchasing by the public. They further stressed the fact that the employees by their restrictive rules and regulations hindered them in conducting their business. They

were especially pronounced in their demand for the privilege of manufacturing cigars by new methods, stating the necessity for this right in order to meet competition and maintain their factories in this Commonwealth. It appeared that some of the larger manufacturers were contemplating leaving the Commonwealth unless some adjustment was reached. The representatives of the employees contended that the employers already have the right to adopt new methods of manufacturing cigars. The conference lasted all day and was adjourned to Friday, April 23, with the suggestion by the Board that the parties in the meantime give the matter careful consideration and be prepared to submit offers which might afford a basis for adjustment of the differences.

At the conference on Friday the representatives of the employees stated that they were not in a position to modify their demands. The Board conferred with the committees apart and impressed upon them the necessity for making such mutual concessions as could reasonably be granted. The employers desired further time for consideration, and it was finally arranged that they should meet with the Board on Saturday morning and submit such offer as they might determine upon. On Saturday the representatives of the employers submitted an offer in writing, under the terms of which an increase was granted on a great majority of the operations, there being a reduction in a few instances. It was further stipulated that if this offer were not acceptable to the employees, the employers were prepared "to arbitrate the existing differences." The Board submitted the offer to the committee of the employees and it was agreed that they would give an answer to the Board on the following Tuesday.

On Tuesday the committee reported that the offer of the employers was unanimously rejected and called the attention of the Board to the fact that under the constitution of their organization a method was provided for determining issues of the nature presented by their demands and, therefore, they did not feel that they were called upon at that time to accept the manufacturers' offer to arbitrate the same. The Board conferred later in the day with the employers and they stated that they were not prepared to make any further concession.

The Board continued to keep in communication with the parties and on May 13 a further conference was called. At this conference the two international officers were present and it seemed to be the consensus of opinion that the time was opportune for an adjustment, if any were to be made. A general and detailed discussion followed, especially as to whether or not the employers would offer further increases upon the basis of a readjustment in the method of performing the work. After an all-day session the conference was adjourned until the following day to give the employers an opportunity to consider the question of submitting a further offer.

On the following day the employers submitted what they termed a "temporary bill," accompanied by the following communication:

"Gentlemen:

"We herewith annex a so-called 'temporary bill', and the following is part of an agreement to carry out the views expressed by both sides:

First. The bill herewith presented to be known as the 'temporary bill,' to be in force until September 1, 1926, by which time all methods then in vogue shall become part of a permanent bill, embodying all kinds of work, in the entire industry; and it will be permissible before September 1, 1926, for either side to open up for revision any one of the jobs, or regulations, now proposed in the temporary bill.

Second. The wage set at the start for a new method shall be adjusted, if necessary, but not more often than once in two weeks, to be effective at the beginning of the next payroll week.

Third. In reference to work now produced by machines making scrap

bunches, it is understood that both roller and bunch-maker shall be considered as a part of the new method and shall be subject to an adjustment as to price for rolling and bunch-breaking, under paragraph two.

Yours very truly,

H. TRAISER & CO., INC.
SILVER CIGAR COMPANY
ELCHO CIGAR COMPANY
ALLES & FISHER, INC."

There was some discussion as to the items of the temporary bill and finally the employers agreed to increase the price of one operation and to modify others. It was also understood that the international officers should be present and use their good offices in endeavoring to adjust any differences which might arise during the period of readjustment. This offer of the employers was submitted to the employees at a meeting that evening and it was accepted with the understanding that the employees should return to work the following week and be re-employed as rapidly as business conditions warranted; it also being understood that in all probability full employment would be resumed in a week or ten days.

The employees returned to work, and thereafter on several occasions the Board was called upon to assist in settling differences which arose.

Textile Industry, New Bedford. On account of alleged grievances on the part of the weavers and loomfixers employed by the Dartmouth Manufacturing Corporation, involving wages and working conditions, some of which it was contended were of long standing, a vote was taken authorizing a strike of these employees in the mill of this company. Upon ascertaining these facts, the Board called a conference with the representatives of the company and of these employees in New Bedford on Friday morning, September 17. Mr. Langshaw, president and agent, acted as spokesman for the company. The employees were represented by a committee of seven, including Mr. Binns, agent of the weavers, and Mr. Batty, agent of the loomfixers. At this conference the representatives of the employees presented their grievances in writing, stating that they had been previously submitted to the company. The parties entered into a thorough discussion of the grievances, some of which were disposed of and others, with the securing of additional information and a willingness on the part of the parties to make mutual concessions, seemed to afford an opportunity for adjustment. The conference ended early in the afternoon with the understanding that the strike, threatened to take effect the early part of the following week, would not occur; and that additional information would be secured and further conferences held by the parties to the end that a full adjustment might be made.

Following this conference the parties entered into negotiations which unfortunately did not accomplish the results anticipated. On October 13 a strike occurred, resulting in the cessation of work of the employees, about 1,500 in number. The Board immediately communicated with the parties, but it was apparent that neither was prepared at that time to make adjustment of their differences. The Board kept informed concerning the matter and after further interviews with the parties, called a conference in New Bedford on Friday morning, November 12. At this conference the employer was represented by Mr. Langshaw and Mr. Bartlett, the treasurer of the company, and the employees by the same committee as previously. Mr. Binns presented in writing the grievances of the weavers, which were three in number. After some discussion two of the grievances were either settled or a means agreed upon for determining the same, so that only one, that in regard to the grading system, was left unsettled. Mr. Batty presented the grievances of the loom-fixers, eleven in number, some of the previous subdivisions being numbered and more specifically outlined. These grievances were discussed at length and some of them were disposed of; as to others, a basis for a probable adjust-

ment was reached; still others offered a difficult problem for solution unless mutual concessions were made. After the joint conference the Board conferred apart with the respective parties. It appeared that the company had offered a modification of the so-called grading system, which, however, did not meet with the approval of the employees. The Board suggested to the representatives of the company that this system be suspended for a period of time, during which an opportunity would be afforded for adjusting it. The period was not acceptable, but the company finally agreed that it would suspend it until January 1, 1927. The other differences were also discussed. The position of the company on the grading system and other propositions was presented to the representatives of the employees by the Board. After discussion it was decided that the matter should be left to Mr. Ross, a member of the Board, to secure further information and confer with the parties and, if found advisable, the full Board would be called into conference.

The information was secured by Mr. Ross and numerous conferences were held by him with the representatives of the employer and of the employees, extending over a period of several days. A basis of settlement was finally reached and on November 24 the employees voted to return to work on the following Monday. The employees resumed work November 29, 1926, with the mutual understanding that grading would be suspended until February 1, 1927 and the final determination of this question would be left to the Board.

ARBITRATION.

The Board rendered decisions upon 201 applications. It will be noted in some instances in the decisions accompanying the report that instead of a description of the operation being given, the items are numbered. This is a new departure, the reason being that the manufacturers, members of the Lynn Shoe Manufacturers' Bureau, and their employees, members of the Boot and Shoe Workers' Union, presented to the Board joint applications in which the operations upon which prices were asked to be determined were numbered instead of being described. Diagrams of the operations with the corresponding numbers placed thereon were presented as evidence at the hearing before the Board. The adoption of the system of using diagrams, which are chiefly on basic operations, and the establishing of prices thereon by the Board have resulted in the parties themselves being able to settle a great number of prices for new work, using the diagrams with the prices established thereon as a basis. Where the parties are unable to agree and the prices for new work are presented to the Board for determination, the Board is very materially assisted in reaching its conclusions by reference to the diagrams.

LIST OF INDUSTRIES AFFECTED AND PRINCIPAL DIFFERENCES IN CONCILIATION AND ARBITRATION CASES.

Conciliation.

Industries Affected: Bill-posting, Building, Cigar, Coal, Foundry, Milk, Plumbing, Rubber, Shoes, Textile, Transportation, Upholstering.

Arbitration.

Industry Affected.

Coal
Trucking
Shoe

Issues Arbitrated.

Wages, conditions
Wages
Wages, discharge, interpretation

FINANCIAL STATEMENT

1926

	Appropriations	Expenditures	Unexpended Balance
Personal services	\$20,800.00	\$12,120.00	\$8,680.00
Expenses	5,000.00	3,853.55	1,146.45
Totals	\$25,800.00	\$15,973.55	\$9,826.45

REPORT OF THE MINIMUM WAGE COMMISSION

EDWARD FISHER, *Chairman*, HERBERT P. WASGATT, SAMUEL ROSS.ETHEL M. JOHNSON, *Acting Director*.

SUMMARY OF WORK FOR 1926

The principal minimum wage work conducted during the year ending November 30, 1926, is represented by inspection to determine compliance with the existing wage decrees, and the establishment of wage boards to recommend minimum rates of wages for women and girls in specified occupations.

Inspection has been made this year under thirteen decrees. In one instance this represents the completion of work initiated the preceding year. The inspection under two other decrees which were started in the fall is in progress at the close of the period covered by this report. In addition inspection on complaint was made in the case of several establishments under two other decrees.

Two wage boards have been established during the present year. One of these has completed its work and submitted a report of its determinations. The other board is still in session. The wage study that was nearing completion at the close of the previous year has been finished.

Decrees establishing minimum rates of wages based on the determinations of the wage boards have been entered for two occupations. In one case this represents revision of an existing rate; in the other, the entrance of a minimum rate for an occupation not previously covered.

On January 1, 1927, there will be in effect wage decrees for eighteen different occupations. In all, thirty-three decrees have been entered since the Minimum Wage Commission began its work in 1913.* A number of these, however, represent the second or third decree for the same occupation. In some instances the revision of rates was accompanied by the establishment of a single board for branches formerly represented by two boards. An outline showing the various wage decrees entered, and the ones now in effect is given in the section following.

Only one firm has been published for non-compliance this year. This is an establishment under the stationery goods and envelopes decree. Publication will probably be necessary in the case of several firms under other decrees during the ensuing year. Follow-up work preliminary to advertisement was not completed in time to permit action during the present year. In the majority of instances, the cases of non-compliance are in firms previously advertised. This should be kept in mind in connection with the summary of inspection work given in Table II, following.

OUTLINE OF FUNCTIONS

The duties of the Minimum Wage Commission under the law comprise the following: investigating the wages of women employees in occupations where there is reason to believe the wages of a number are below the requirements of healthful living; establishing wage boards to recommend minimum rates of wages for women and minors; entering wage decrees based on the recommendations of the boards; inspecting to determine compliance with the decrees; and publishing the results of its findings. An account of the work conducted during the year along these lines is given in the statement following.

PUBLICATIONS

Minimum wage publications issued are the annual report and the leaflets giving the provisions of the statements and decrees. This includes for the present year the reprint from the section of the annual report of

* The law was passed in 1912, effective July, 1913.

the Department dealing with minimum wage matters, and the statement and decree for candy, revised, and for stationery goods and envelopes.

CONFERENCES AND HEARINGS

Public hearings have been held by the Commission on the determinations of the reconvened candy board and the wage board for jewelry and related lines. As is the case each year, a number of individual conferences have been held by the Commission and by the Assistant Commissioner with the employers regarding the adjustment of cases of non-compliance in their establishments.

The Assistant Commissioner has addressed the meetings of employees arranged to explain the work of the wage boards and secure nominations for the wage boards in process of formation, has interviewed the wage board candidates, and sat with the boards in session as secretary of the board and representative of the Commission.

Assistance has been given a number of individuals and public and private agencies that have been making studies of minimum wage work in Massachusetts. The most extensive of these investigations are those being conducted by the United States Women's Bureau, the United States Children's Bureau, and the National Industrial Conference Board.

INVESTIGATIONS

Electrical Machinery and Supplies

The study of the wages of women employed in the manufacture of electrical machinery and supplies was made in 1925. The field work was nearly completed at the beginning of the present year. The period covered by the inquiry is the three months March through May, 1925. In connection with this work agents of the Commission visited representative establishments in 16 cities and towns. Payroll records available for tabulation were secured for 2,443 women in 34 firms. Of this number, nearly one-half (47.1) were earning under \$15 a week; and nearly one-third (31.8) under \$13 a week. Of the 761 women paid on a time basis, two-thirds (65.2) had rates for full time employment below \$15 a week, and more than one-third (36.8) had rates below \$13 a week. The tables showing in detail the wage situation found in the investigation are on file in the Commission's office.

WAGE BOARD WORK

Two wage boards have been in session this year. These are the boards for jewelry and related lines, and for toys, games and sporting goods. The last mentioned board is still in session. In addition, the reconvened candy wage board which reported in 1925 was called into conference by the Commission and submitted a revised report during the present year. An account of the work of these boards is given below.

Candy Wage Board, Reconvened

As the determinations of the candy wage board had not been acted upon at the close of the preceding year, the work of this board, although belonging mainly to the previous year, is recorded here. As explained in the previous report, the candy wage board was reconvened to give opportunity for revision of the existing rates if the board so desired. On November 18, 1925, the board submitted to the Commission a report of its determinations.

The Commission called the board into conference on December 16, 1925, following which the board submitted an amended report signed by all of the members. In connection with their recommendations, the board estimated the cost of living as \$13 and recommended a minimum rate to correspond, also a special minimum rate of \$9 for beginners.

As explanation of their recommendation for an increase over the former rates although the index numbers on the general cost of living varied but

slightly from those of the previous date, the board called attention to the fact that the marked increase in prices during the time the previous board was in session made it possible that the budget then adopted was not fully responsive to rapidly changing conditions.

Following are the board's determinations as to the minimum rate for women and girls employed in the occupation in the state:

1. For employees of ordinary ability, not less than \$13 a week.
2. For beginners not less than \$9 a week.
3. An employee shall be considered of ordinary ability after employment in a candy factory at least one year.

The Commission provisionally approved these determinations and held a public hearing thereon January 6, 1926. No one appeared in opposition to the determinations. The Commission thereafter approved finally the determinations of the board and entered a decree effective March 1, 1926, to supersede the one entered July 19, 1919.

Jewelry and Related Lines Wage Board

As a result of the investigation of the wages of women employed in the manufacture of jewelry and related lines conducted in 1924, the Commission in the summer of 1926 established a wage board for the occupation. The scope of the industry considered includes the manufacture of jewelry, jewelry findings, optical goods, watches and clocks.

A board of fifteen members was formed consisting of six representatives of employers in the occupation, six representatives of the women employees, and three representatives of the public, one of whom served as chairman. The board held eight meetings, the first on June 3, 1926, and on August 11 of that year submitted to the Commission a report of its determinations signed by all of the members.

In considering the needs of self-supporting women in the occupation, the board adopted a cost of living budget of \$14.95. Owing to the financial condition of the industry as indicated by the number of recent liquidations, they recommended a minimum rate of \$14.40 a week with a special minimum rate for beginners of \$12 a week. Following are the determinations of the board in detail as to the minimum rate of wages for women and girls of ordinary ability employed in the jewelry and related lines occupation:

1. That the minimum rate for a female employee of ordinary ability should be \$14.40 a week.
2. That an employee should be deemed of ordinary ability who has been employed for six months in the occupation and has reached the age of twenty years.
3. That beginners, irrespective of age, should receive not less than \$12.00 a week.

The Commission provisionally approved the determinations of the board and held a public hearing thereon, September 9, 1926. At this hearing no one appeared in opposition. The Commission thereafter approved finally the determinations of the board and ordered that a decree based thereon should be entered, effective January 1, 1927.

Toys, Games and Sporting Goods Wage Board

The Commission in 1924 made an investigation of the wages of women employed in the manufacture of toys, games and sporting goods. As a result of this inquiry, a wage board was established for the occupation in the fall of 1926. The occupation considered includes the manufacture of toys, games, kindergarten supplies, and sporting goods. A board of seven members was formed, consisting of three representatives of employers in the occupation, three representatives of the women employees, and one representative of the public who served as chairman. The board has held five meetings, and is still in session at the close of the period covered by this report.

ENFORCEMENT OF WAGE DECREES

Inspection has been made during the year under thirteen decrees. These represent the following occupations: bread and bakery products, candy, canning and preserving and minor lines of confectionery, corset, druggists' preparations, proprietary medicines and chemical compounds, knit goods, laundries, millinery, office building cleaners, paper box, stationery goods and envelopes, women's clothing, and retail stores. In addition inspection has been made on complaint in the case of firms under the men's furnishings and muslin underwear decrees.

In connection with this work 2,267* visits were made. Wage records were secured for 36,983** women in 1,361 establishments. In addition to this a large number of reinspection visits were made to establishments under the various decrees in an effort to adjust cases of non-compliance.

In the case of the millinery occupation the inspection was initiated the preceding year and carried over into the present year. The inspection under the women's clothing and retail store decrees was started in the fall of the present year and is still in progress. This represents the second inspection of retail stores since the present decree became effective June 1, 1922.

In the case of the laundry decree this is the second general inspection made since that decree became operative July 1, 1922. In the case of the revised candy decree and stationery goods and envelopes occupation decree, the inspection this year represents the initial work under a new decree.

There were pending at the beginning of the year 86† cases of non-compliance in 19 establishments. These were under the following decrees: candy, canning and preserving and minor lines of confectionery, corset, laundry, millinery, office cleaners, retail stores and women's clothing. In 26 of these cases adjustment was made by raising wages or the employee in question was earning the minimum at the reinspection. In 56 cases the employees left. There were 3 cases in firms that went out of business during the year. One case is still pending.

In the course of the regular inspection work for the year, wage records were secured for 36,454†† women in 1,361 establishments under 15 decrees. Of this number, 34,479 or 94.6 per cent, represented full compliance. There were 1,030 establishments with 22,753 employees showing full compliance at the time of the first inspection. There were 1,968 cases of non-compliance found in 328 establishments. The majority of these were in firms that had previously been advertised. Most of the remaining cases have been adjusted.

In the case of 596 of these non-compliances, representing 213 establishments, adjustment was made by raising wages, shortening hours, transferring employees from time to piece work, or to another kind of work where they were able to earn the minimum. In 74 cases in 15 establishments adjustment was reported or promised before the end of the period covered by this report. There were 75 cases recorded as special license or special license type, or covered by the piece rate ruling.‡ In 141 cases, representing 60 establishments, the employees left.†† In addition there were 6 reported as discharged. The disposition of the remaining cases is shown in Table II, following.

There are pending at the close of the year, 1,049 cases in 85 establishments. Some of these will doubtlessly be adjusted. A large part, how-

* Includes revisits made where records were not available at first inspection.

** 36,454 records available for tabulation were secured.

† These include the cases listed as pending in tables 1, 2 and 3 of the report of the Division of Minimum Wage for the year ending November 30, 1925.

†† This represents the records secured for tabulation in the regular inspection work. It does not include the records secured in connection with the adjustment of cases pending at the beginning of the year, or in the cases not covered by decrees.

‡ See note on Table II, following.

†† See note on this subject on Table II, following.

ever, are in firms previously advertised under the laundry, paper box, and retail store decrees.*

As the inspection under the stationery goods and envelopes decree and the revised decree for the candy occupation, represent the initial examination, the extent of compliance is of interest. Wage records were secured for 4,542 women in 115 candy factories, and for 4,450 women in 80 establishments manufacturing stationery goods and envelopes. In the case of 4,452 candy workers, and 4,229 employees in stationery goods establishments, all necessary adjustments had been made prior to the inspection. There were 90 cases in 29 candy factories and 221 cases in 39 stationery goods establishments requiring adjustment. The majority of these were settled before the close of the year. There are at the present time 10 cases in 2 candy factories pending and 18 cases in 1 stationery goods and envelopes establishment advertised for non-compliance.

Non-compliances outstanding under the candy decree represent .2 percent of the employees for whom records were secured, and 1.7 in the case of the establishments. In the case of the stationery goods and envelopes decree, the non-compliances in the firm advertised represents .4 percent with respect to the employees, and 1.3 percent with respect to establishments.

* Of the cases pending at the close of the year the following are in firms previously advertised: laundry, 397 cases in 20 establishments; retail stores, 321 cases in 16 establishments representing 9 firms; paper box, 79 cases in 6 establishments; druggists' preparations, 14 cases in 2 establishments; women's clothing, 8 cases in one establishment.

TABLE I

Disposition of Cases of Non-Compliance Pending from 1925

(C — Cases; E — Establishments)

	Pending from 1925*		ADJUSTMENT**								PENDING	
			Wages Raised		Earning Minimum on Piece Work		Firm out of business		Left**			
	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.
Candy	1	1	—	—	—	—	—	—	1	1	—	—
Canning and Preserving	4	1	—	—	—	—	—	—	4	1	—	—
Corset	23	1	2	1	1	1	—	—	20	1	—	—
Laundry	5	1	1	1	—	—	—	—	4	1	—	—
Millinery	8	7	4	3	—	—	—	—	3	3	1	1
Office Cleaners	10	1	10	1	—	—	—	—	—	—	—	—
Retail Store	30	3	7	2	—	—	—	—	23	2	—	—
Women's Clothing	5	4	1	1	—	—	3	2	1	1	—	—
Total	86*	19*	25	9	1	1	3	2	56	10	1	1

* Includes cases pending shown in tables I, II and III of report of 1925.

** See notes on Table II following.

TABLE II
Summary of Inspections for 1926 Under Massachusetts Minimum Wage Decrees

(C — Cases; E — Establishments)

DISPOSITION OF CASES	BREAD AND BAKERY		CANDY ¹⁰		CANNING AND PRESERVING		CORSET		DRUGGISTS' PREPARATIONS		KNIT GOODS		LAUNDRY		MEN'S FURNISHINGS ⁹	
	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.
Records for tabulation and estab. represented	1,105	33	4,542	115	653	60	831	16	765	55	1,619	48	5,098	299	349	3
Compliance at inspection	1,092	33	4,452	115	609	60	794	16	735	54	1,596	48	4,505	299	320	3
Establishments with full compliance and cases	1,015	28	3,071	86	506	48	184	9	622	46	765	37	2,784	225	—	—
Cases of non-compliance	13	5	90	29	44	12	37	7	30	9	23	11	593	74	29	3
ADJUSTMENT ³	13	5	80	29	38	12	37	7	15	7	23	11	148	48	28	2
Wages raised	13	5	55	25	15	8	3	3	10	5	18	9	106	39	8	2
Earning minimum on piece work	—	—	1	1	—	—	25	4	—	—	1	1	—	—	2	1
Hours reduced or change of work	—	—	1	1	—	—	—	—	1	1	—	—	4	1	—	—
Adjustment reported ⁴	—	—	—	—	1	1	—	—	2	1	—	—	—	—	15	2
Covered by piece rate ruling ⁵	—	—	—	4	—	—	6	3	—	—	4	2	19	10	2	2
Special license, special license type or similar case ⁶	Not	—	11	—	—	—	—	—	2	1	—	—	—	—	1	1
Not under decree ⁷	—	—	12	6	18	3	2	2	—	—	—	—	18	13	—	—
Left ⁸	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Discharged	—	—	—	—	3	1	—	—	—	—	—	—	—	—	—	—
Firm bankrupt or out of business	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ADVERTISED IN 1926	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PENDING	—	—	10	2	6	1	—	—	15	3	—	—	**445	30	1	1

¹ Partial inspection. Work initiated previous year or in process at close of present year.

² Records taken in conjunction with Retail Store decree.

³ Does not include cases adjusted before agent's visit.

⁴ Adjustment reported by firm. Agent has not revisited.

⁵ Piece rate ruling.—Where great majority of employees on given process are making the minimum or over, the rates are considered as conforming with the decree.

⁶ Special license type, etc., includes cases of technical, but not actual non-compliance.

⁷ Includes cases incorrectly classified.

⁸ Some of those reported as left were probably discharged. This information, however, was not given to the inspector.

⁹ Inspection on complaint.

¹⁰ Initial inspection.

** The majority of the cases are adjusted voluntarily on or before the date the decree becomes effective, so that many firms have full compliance at the inspection.

** The majority of these cases are in firms previously advertised.

TABLE II — Concluded
Summary of Inspection for 1926 Under Massachusetts Minimum Wage Decrees — Concluded
 (C — Cases; E — Establishments)

DISPOSITION OF CASES	MILLEN- ERY ¹		MUSLIN UNDER- WEAR ⁹		OFFICE CLEAN- ERS ²		PAPER BOX		RETAIL STORE ¹		STATION- ERY GOODS ¹⁰		WOMEN'S CLOTH- ING ¹		TOTAL	
	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.
Records for tabulation and establishments represented	661	79	28	1	14	6	3,884	157	12,047	400	4,450	80	402	8	36,454	1,361
Compliance at inspection	628	77	23	1	8	5	3,712	157	11,385	393	4,229	80	390	8	34,479	1,351
Establishments with full compliance and cases	308	64	5	1	6	3	3,643	114	7,665	326	2,050	39	134	6	22,753	1,030
Cases of non-compliance	32	15	5	1	6	3	171	43	662	74	221	39	12	3	1,968	328
Adjustments ³	30	13	5	1	4	1	84	35	189	47	203	38	4	2	901	259
Wages raised	19	9	1	1	4	1	55	22	74	28	161	36	3	1	545	194
Earnings minimum on piece work								2	2	2	14	4			43	11
Hours reduced or change of work	1	1					2	2	67	12	2	1			74	8
Adjustment reported ⁴							3	2	1	1	3	3			31	9
Covered by piece rate ruling ⁵	5	1					2	2							44	25
Special license, special license type or similar case ⁶							3	2							5	3
Not under decree ⁷	5	3	4	1			19	14	40	6	21	10	1	1	141	60
Left ⁸															6	2
Discharged															4	2
Firm bankrupt or out of business															1	1
ADVERTISED IN 1926															18	85
PENDING	2	2			2	2	** 87	11	**473	32	18	1	8	1	1,049	

¹ Partial inspection. Work initiated previous year or in process at close of present year.

² Records taken in conjunction with Retail Store decree.

³ Does not include cases adjusted before agent's visit.*

⁴ Adjustment reported by firm. Agent has not revisited.

⁵ Piece rate ruling.—Where great majority of employees on given process are making the minimum or over, the rates are considered as conforming with the decree.

⁶ Special license type, etc., includes cases of technical, but not actual non-compliance.

⁷ Includes cases incorrectly classified.

⁸ Some of those reported as left were probably discharged. This information, however, was not given to the inspector.

⁹ Inspection on complaint.

¹⁰ Initial inspection.

* The majority of the cases are adjusted voluntarily on or before the date the decree becomes effective, so that many firms have full compliance at the inspection.

** The majority of these cases are in firms previously advertised.

*Minimum Wage Decrees Established in Massachusetts Since Enactment of the
Minimum Wage Law (Effective July 1, 1913) to January 1, 1927*

OCCUPATIONS	Minimum Rate	Date Entered	Date Effective	
1. *Brush	\$0.155 hr.	June 29, 1914	Aug. 15, 1914	Obsolete
2. *Laundry	8.00	July 1, 1915	Sept. 1, 1915	"
3. *Retail Stores	8.50	Sept. 15, 1915	Jan. 1, 1916	"
4. *Women's Clothing	8.75	Sept. 28, 1916	Feb. 1, 1917	"
5. *Men's Clothing and Raincoats	9.00	Aug. 31, 1917	Jan. 1, 1918	"
6. *Men's Furnishings	9.00	Oct. 26, 1917	Feb. 1, 1918	"
7. *Muslin Underwear	9.00	July 1, 1918	Aug. 1, 1918	"
8. *Retail Millinery	10.00	July 1, 1918	Aug. 1, 1918	"
9. *Wholesale Millinery	11.00	Nov. 30, 1918	Jan. 1, 1919	"
10. *Office Cleaners	.30 A.M. .26 P.M.	Jan. 27, 1919	April 1, 1919	"
11. *Canning and Preserving	11.00	July 21, 1919	Sept. 1, 1919	"
12. *Candy	12.50	July 19, 1919	Jan. 1, 1920	"
(1) 13. **Corset	13.00	Dec. 27, 1919	Mar. 1, 1920	In effect
(2) 14. *Men's Clothing and Raincoats ¹ (re- vised)	15.00	Dec. 27, 1919	Feb. 1, 1920	"
(3) 15. **Knit Goods	13.75	Mar. 13, 1920	July 1, 1920	"
16. **Women's Clothing (revised)	15.25	May 6, 1920	July 1, 1920	Obsolete
17. **Paper Box	15.50	May 26, 1920	July 1, 1920	"
(4) 18. Office Cleaners (revised)	15.40	Dec. 30, 1920	Feb. 1, 1921	In effect
19. **Minor Confectionery	12.00	Oct. 4, 1921	Nov. 1, 1921	Obsolete
(5) 20. Paper Box (revised)	13.50	April 27, 1922	May 15, 1922	In effect
(6) 21. Women's Clothing (2d revised)	14.00	April 27, 1922	May 15, 1922	"
(7) 22. Muslin Underwear (revised)	13.75	April 27, 1922	June 1, 1922	"
(8) 23. **Men's Furnishings (revised)	13.75	April 27, 1922	June 1, 1922	"
(9) 24. Retail Stores (revised)	14.00	April 27, 1922	June 1, 1922	"
(10) 25. Laundry (revised)	13.50	May 19, 1922	July 1, 1922	"
(11) 26. Brush, ² (revised)	13.92	Jan. 25, 1923	Mar. 1, 1923	"
(12) 27. Druggists' Preparations and Proprietary Medicines	13.20	Sept. 27, 1923	Jan. 2, 1924	"
(13) 28. Canning and Preserving, Minor Con- fectionery and Food Preparations ³ (combined and revised)	13.00	Nov. 3, 1924	April 1, 1925	"
(14) 29. Bread and Bakery Products	13.00	Feb. 17, 1925	May 1, 1925	"
(15) 30. Millinery ⁴ (combined and revised)	13.00	Mar. 24, 1925	July 1, 1925	"
(16) 31. Stationery Goods and Envelopes	13.75	Oct. 27, 1925	Jan. 1, 1926	"
(17) 32. Candy	13.00	Jan. 26, 1926	Mar. 1, 1926	"
(18) 33. Jewelry and Related Lines (revised)	14.40	Sept. 9, 1926	Jan. 1, 1927	"

* Decree entered prior to consolidation of State Departments, December, 1919.

** Wage boards established or authorized, or arrangements for reconvening made prior to consolidation of Departments, December, 1919.

¹ The Men's Clothing and Raincoat Wage Board was reconvened in 1921 to revise the existing rates. The board recommended a minimum rate of \$14.75. This was not approved by the Commission.

² The Brush Wage Board was reconvened in 1921. This board recommended a minimum rate of \$14.40. This was not approved by the Commission. Another board was formed in 1922, which recommended a minimum rate of \$13.92. The present decree is based on this recommendation.

³ This board combines the work of the former Canning and Preserving Board and the Minor Confectionery and Food Preparations Wage Board.

⁴ This board combines the work of the former Retail Millinery Occupation Board and the Wholesale Millinery Occupation Board. Figures in () refer to decrees now in effect.

FINANCIAL STATEMENT

For the Year Ending November 30, 1926, for the Division of
Minimum Wage.

Account	Appropriation	Expenditures	Un- expended Balance
Personal Services	\$11,000.00	\$10,092.46	\$907.54
Traveling and Other Expenses	3,400.00	2,292.03	1,107.97
Wage Board Salaries and Expenses	3,000.00	1,382.90	1,617.10
	<u>\$17,400.00</u>	<u>\$13,767.39</u>	<u>\$3,632.61</u>

REPORT OF THE DIVISION OF STANDARDS

FRANCIS MEREDITH, *Director of Standards.*

As indicated in previous reports successive Legislatures have given a broader scope of activity to this Division by imposing additional statu-

tory duties and responsibilities upon the Director and the past year has been no exception.

LEGISLATION ENACTED IN 1926

The General Court during the session of 1926 enacted five bills amending the statutes regulating the sale of various commodities and the licensing of transient vendors all of which weights and measures officials are required to enforce. Following is a synopsis of these bills and their effect upon existing statutes:—

Chapter 120, Relative to Transient Vendors.—The former statute (section 22, chapter 101, General Laws, as amended) exempted from license “bona fide sales at wholesale of goods, wares or merchandise by sample for future delivery.” This has now been amended by striking out the words “at wholesale,” thus exempting all bona fide sales by sample, either wholesale or retail. The change was made necessary because of a United States Court decision that the requirement of a license to take orders for goods to be shipped later from another state conflicts with the commerce clause of the Federal Constitution.

This act also amends section 3, chapter 101, in such a manner that “intent” is immaterial if any business is such as to be a “transient business” as defined in section 1 of that chapter.

Chapter 122, An Act Further Regulating the Retail Sale of Ice.—This Act amends the former Ice law (sections 157-159, chapter 94, General Laws) so as to require each dealer in ice to furnish to sealers of weights and measures a copy of his current retail price-list, to keep such list conspicuously posted on each side of his delivery vehicles, and to sell ice by weight only, under penalties provided for failure to comply with these requirements.

Chapter 217, An Act Relative to the Sale of Coal in Paper Bags or Sacks.—Section 241, chapter 94, General Laws, is amended by this Act. In addition to previous requirements as to marking of coal bags, such bags must hereafter be plainly and conspicuously marked with the classification of the coal therein, whether anthracite, semi-anthracite, bituminous containing less than 23 per cent volatile matter, or bituminous containing more than 23 per cent volatile matter, and with the size of the coal contained therein. It should also be noted that the amended law requires the weight only to appear in “bold uncondensed type at least one inch in height,” all other required markings to be plain and conspicuous.

Chapter 382, An Act Authorizing the Establishment of a Legal Standard of Sizes for Anthracite Coal Sold in the Commonwealth.—This Act, as well as chapter 217, was enacted upon recommendation of the Special Commission on the Necessaries of Life, following complaints of housekeepers in the past year that the domestic sizes of anthracite for which they paid high prices contained an excessive amount of smaller and cheaper sizes. It provides that the director of standards shall from time to time by rule or regulation establish standard sizes for anthracite coal offered for sale within the Commonwealth with variances or tolerances not to exceed five per cent determined by weight. This legislation should afford protection to retail coal dealers and to the ultimate consumer alike, as it provides a flexible method of dealing with changing conditions without further legislative action.

Chapter 321, An Act Relative to the Registration of Optometrists.—Although not so indicated by its title, this Act is of interest in connection with the enforcement of the Hawker's and Pedler's license law which is affected by this enactment. Chapter 101, General Laws, prohibits the sale by hawkers and pedlers of jewelry, furs, wines, spiritous liquors and playing cards. As amended by chapter 321, Acts of 1926, section 72, chapter 112, General Laws, now provides that “Whoever, not being lawfully authorized to practice optometry . . . sells or attempts to sell spectacles, eyeglasses or lenses for the purpose of correcting defective vision,

shall be punished by a fine of not less than fifty nor more than two hundred dollars or by imprisonment for not more than three months, or both, and for a subsequent offence by a fine of not less than two hundred nor more than five hundred dollars or by imprisonment for not less than three nor more than six months, or both. Hawkers and pedlers, unless they are also registered optometrists, cannot in future sell or offer for sale spectacles, eyeglasses or lenses for the purpose of correcting defective vision, without rendering themselves liable to fine and imprisonment.

Of the foregoing, chapter 120 was enacted upon recommendation of the Director of Standards, following a decision of the United States Court which necessitated an amendment of the Transient Vendor's license law in order to preserve its constitutionality; chapter 122, upon petition of the Massachusetts Association of Sealers of Weights and Measures and endorsement of the Massachusetts Ice Dealers' Association; chapters 217 and 382, upon recommendation of the Special Commission on Necessaries of Life; and chapter 321, upon recommendation of the Board of Registration in Optometry.

ESTABLISHMENT OF STANDARD SIZES OF ANTHRACITE COAL.

On April 1, 1925, the Anthracite Operators' Conference, representing about 98 per cent of the total production, established for the first time a uniform standard for the preparation of domestic sizes of anthracite at the mines. With uniform sizing at the mines it should be easily possible for dealers and consumers to purchase in accordance with such standards. Following complaints from householders that coal delivered to them contained an excessive amount of smaller and cheaper sizes, the Special Commission on the Necessaries of Life recommended "that a legal standard of sizing for domestic anthracite be established in this Commonwealth." This recommendation resulted in the enactment by the General Court of the following statute:—

(CHAP. 382.)

An Act Authorizing the Establishment of a Legal Standard of Sizes for Anthracite Coal Sold in the Commonwealth.

Be it enacted, etc., as follows:

Chapter ninety-four of the General Laws is hereby amended by inserting after section two hundred and thirty-nine the following new section:—*Section 239A.* The director of standards shall from time to time by rule or regulation establish standard sizes for anthracite coal offered for sale within the commonwealth, with variances or tolerances not to exceed five per cent determined by weight.

Approved May 28, 1926.

This Act required the director to establish standards of sizes and also to determine permissible variations or tolerances not to exceed five per cent. As the established mine standards already permitted 20 per cent of undersize in Chestnut, and 15 per cent in all other sizes, the statute could only be construed as providing for a further allowance of undersize, not exceeding 5 per cent by weight, to cover degradation caused by breakage in transportation and rehandling between the mine and the consumers' coal-bins.

In order to secure first-hand information as to exact conditions existing in the retail coal trade of Massachusetts the director made personal inspection of the methods of handling both water-borne and all-rail coal at some of the larger plants. He also mailed a questionnaire to approximately 800 retail coal dealers and tabulated the information thus obtained.

Sizes of Square Mesh Over Which Anthracite Coal Is Screened by Massachusetts Coal Dealers Before Delivery To Consumers.

Nominal Size of Coal	Number of Dealers Reporting	Maximum Mesh Used	Minimum Mesh Used	Average Mesh Used
Broken	101	2 inch	$\frac{3}{8}$ inch	1 $\frac{3}{16}$ inch
Egg	239	2 $\frac{1}{2}$ inch	$\frac{3}{8}$ inch	1 inch
Stove	282	1 $\frac{9}{16}$ inch	$\frac{3}{8}$ inch	$\frac{3}{4}$ inch
Chestnut	264	$\frac{3}{4}$ inch	$\frac{1}{4}$ inch	$\frac{1}{2}$ inch
Pea	221	$\frac{1}{2}$ inch	$\frac{1}{8}$ inch	$\frac{3}{8}$ inch

The foregoing synopsis shows at a glance the wide diversity in sizes of screens used in retail coal yards. The majority of complaints from consumers related to Chestnut coal and particular attention was therefore paid to the methods employed by retail dealers in handling coal of this nominal size. It was found that 64 retailers, or over 21 per cent of the total number reporting, were rescreening Chestnut coal before delivery over screens so large as to remove a substantial portion of the smaller coal, permissible under the operators' standards, which they received in the shipment from the mines. Twenty-one of these dealers were using larger screens than those used at the mines for coal of this size. This practice entails an unnecessary loss to the retailer, with resultant higher price to the consumer or reduced margin of profit to the dealer.

On the other hand 98 retailers, or 33 $\frac{1}{3}$ per cent of those reporting, were using screens of such small size that Chestnut coal as delivered to their customers retained an unwarranted amount of pea, buckwheat, and other fine coals. Other cases were observed in which the teamsters or helpers, when not under scrutiny, were inclined to load without screening, or to use the screen nearest at hand, regardless of its adaptability for the size being loaded.

The average size of screens used for Chestnut was found to be $\frac{1}{2}$ inch, and 132 dealers, or 44.9 per cent of those reporting, were using this size which appeared to be ideal for the purpose, its use serving to retain all of the "pea" size, as received from the shipper, while eliminating a portion of the dust and finer sizes resulting from breakage in handling.

OPERATORS' GUARANTEE TO RETAILERS.

On May 12, 1925, following the adoption of standards by the Anthracite Operators' Conference, Mr. Walter Gordon Merritt, addressing the eighth annual convention of the National Retail Coal Merchants Association at Atlantic City as official spokesman for the operators producing 98 per cent of the Pennsylvania anthracite tonnage, stated that the anthracite operators "are trying to get together with the retailers in order to improve conditions in a way that cannot possibly be accomplished by either group of us playing a lone hand."

Later, he gave all retailers handling anthracite this guarantee:—"The anthracite operators are in honor bound to live up to those standards.

We do not want anybody to be afraid to complain. . . . If you find that the coal is not as represented at the time of sale, and if you have any timidity about bringing it up individually to the particular operator in question, bring it up through your Trade Relations Committee and let them put it up to us with all the force of your organization behind you."

Consideration of the facts developed, confirmed by interviews and correspondence with representative coal dealers in all sections, leads to the conclusion that the interests of all would be sufficiently safeguarded by adopting the existing standards for sizing, including the allowable content of smaller sizes, as recommended by the Anthracite Operators' Conference, and establishing the same as the legal standard sizes for anthracite coal offered for sale within the Commonwealth. It also appears that the "Operators' Guarantee to Retailers," as quoted above, is sufficient to ensure receipt of standard merchantable coal by the retailer or to provide for redress, if in any case sub-standard coal is delivered to him. It

is evident, however, that some further degradation of sizes may result from unavoidable breakage in transit and delivery from the retailer to the customer's bin. Chapter 382, Acts of 1926, requires the director to establish variations or tolerances not to exceed five per cent determined by weight. From the best information available it appears that a tolerance of $2\frac{1}{2}$ per cent, or 50 pounds to the ton, to be applied only after delivery of coal to the consumer, will amply cover this additional degradation.

Much of the existing discontent and complaints regarding undersize coal are doubtless due to the difference in the present standards of mine sizes as compared with the sizes ordinarily delivered previous to the adoption of the new standards by the mine operators. This difference is shown by the following illustration of the standard round mesh screen over which Chestnut coal is sized at the mines today and that which was used previous to April 1, 1925, for the same purpose.

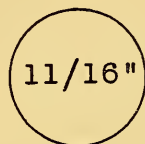


Fig. 1



Fig. 2

Figure 1 represents size of screen mesh over which Chestnut coal passes according to present mine sizes.

Figure 2 represents screen mesh over which Chestnut coal was sized previous to the establishment of present mine sizes.

Practically all of the anthracite shipped to this State is ordered and received by local dealers according to the established mine sizes. Should different standards of sizing be adopted by the Director of Standards, necessitating re-sizing by the dealer before delivery, the inevitable result would be an increase in retail coal prices without any corresponding benefit to the consumer. It has therefore been determined that the interests of all may be best subserved by the adoption of the existing mine operators' standards including the allowable percentages of undersize, as the legal standard sizes for anthracite coal offered for sale in this Commonwealth, with a tolerance of $2\frac{1}{2}$ %, or 50 lbs. to the ton, to cover unavoidable breakage between the dealers' yard and the consumers' coal bin. Following are the standard sizes as established by the Director, sizes being based upon round mesh screens so as to conform to the methods of sizing at the mines.

LEGAL STANDARD SIZES FOR ANTHRACITE COAL OFFERED FOR SALE IN THE COMMONWEALTH OF MASSACHUSETTS

Established by the Director of Standards as required by Chapter 382, Acts of 1926. Effective on and after January 1, 1927.

Note: The terms used to indicate the various sizes are those generally used in the coal trade and are in accordance with established trade custom.

Standard Size	Through (Round Mesh)	Over (Round Mesh)	Maximum Undersize Per Cent
Broken	4-7/16"	3-7/16"	15
Egg	3-7/16"	2-8/16"	15
Stove	2-8/16"	1-9/16"	15
Chestnut	1-9/16"	11/16"	15*
Pea	11/16"	8/16"	15

* The aggregate of all undersize in Broken, Egg, and Stove sizes shall not exceed 15 per cent. In the case of Chestnut coal, the 15 per cent of undersize is limited to Pea coal, the next smaller size, but there may be in addition not more than 5 per cent of sizes smaller than Pea which result from unavoidable breakage.

Tolerance. (Applicable only after delivery of coal to consumer.) Anthracite coal examined after delivery to consumer shall not be considered as below the standard sizes prescribed herewith because of the fact that it contains additional undersize not exceeding $2\frac{1}{2}$ per cent, or 50 lbs. per ton of 2,000 lbs., which may be traceable to unavoidable breakage occurring in the course of such delivery.

RETAILERS' COAL SCREENS.

Although the standard mine sizes are and have been based upon round mesh screens, the retail coal dealers, with few exceptions, appear to find the square mesh more convenient for use in loading coal for delivery to their customers. According to the majority of dealers this screening is designed only to remove dust and dirt, the sizes being predetermined by the mine screens. Reference has already been made to the wide diversity in sizes of square mesh screens used by retailers in various sections. It is probable that greater uniformity in this respect would tend to eliminate some source of misunderstanding and complaint. From investigation it appears that the use of the following sizes of square mesh by retailers in loading coal for delivery would retain such undersize as might reasonably be included in coal when received from the mines, while eliminating any extra fine sizes and dirt:—Broken, 2 8/16 inches; Egg, 1 9/16 inches; Stove, 11/16 inch; Chestnut, 8/16 inch.

When the use of such screens indicates the presence of undersize, in greater amount than the maximum specified in the operators' standards, the retailer may report at once to the Director so that it may be officially determined whether the size of coal shipped conforms with that which was purchased by the dealer and appropriate action taken after such determination.

DIVISION PUBLICATIONS.

The publications issued by this Division during the year were:—

1. Revised edition of the pamphlet "General Laws of Massachusetts Relating to Weights and Measures and the Licensing, Inspection and Sale of Various Articles," as amended to July 1, 1925.
2. Bulletin No. 22, August, 1926, containing amendments and additions to the statutes relating to weights, measures, licenses, etc., with a list of weighing and measuring devices approved or disapproved by the Director of Standards as required by Chapter 72, Acts of 1925, and other information of interest to sealers and other officials.
3. Bulletin No. 23, November, 1926, containing revised rules and regulations governing the manufacture and sale of bread, and the marking of packages containing foods, established by the Director of Standards under statutory authority.
4. Pamphlet, "Transient Vendors' License Laws."
5. Pamphlet, "Hawkers and Pedlers' License Laws."
6. Pamphlet, "Massachusetts Statute Relative to the Weights of Bread, with Rules and Regulations to be observed in the manufacture and sale thereof."

CLINICAL THERMOMETERS.

The importance of accurate clinical thermometers was given a prominent position on the programmes of the National Conference on Weights and Measures, held at Washington, D. C., in May, and the Annual Convention of the Massachusetts Association of Sealers of Weights and Measures held at Hyannis, Mass., in October. By request, papers on this subject were prepared by Inspector Dawson, in charge of this branch of divisional activities, and read at each of these conventions.

No clinical thermometer may be legally offered for sale in this State, unless it has been sealed, marked or certified as correct by the Director of Standards, or by the manufacturer under authority of the Director. One

additional manufacturer has been authorized to seal his products and the authority previously granted to another was suspended.

This suspension followed examination and test of six gross of clinical thermometers bearing this manufacturer's seal-mark which had been shipped by him to an institution on the Pacific coast and later forwarded by the institution to this office for test.

Having received authentic reports that representatives of concerns in other states have recently visited institutions in this State and sold thermometers of doubtful accuracy, which were afterward shipped interstate to the purchasers, an intensive survey of all clinical thermometers in the hands of institutions and druggists is now being made with the co-operation of local sealers of weights and measures.

LABORATORY WORK.

Laboratory activities during the year included the following:—

Calibration of Standards.

ARTICLE.	Tested.	Adjusted.	Sealed.	Con- demned.
Avoirdupois Weights	714	457	711	3
Apothecary Weights	8	—	8	—
Metric Weights	9	1	9	—
Glass Graduates	114	—	110	4
Liquid Measures	6	—	6	—
Linear Measures	2	—	2	—
Totals	853	458	846	7

Clinical Thermometers.

DESCRIPTION.	Tested.	Passed.	Rejected.	Per Cent Passed.
Massachusetts Seal	1,408	876	532	62.21
Domestic Unsealed	1,860	1,384	476	74.40
Foreign Unsealed	45	21	24	46.66
Totals	3,313	2,281	1,032	68.84

Total number submitted, 3,357; broken when received, or before or during test, 44; total number tested, 3,313.

Cans, Cartons, and Other Containers, Measures, etc., Submitted in Connection with Manufacturer's Application for Approval, or for Authority to Affix the Manufacturer's Seal Thereon.

ARTICLE.	Tested.	Accurate.	Inac- curate.
Cartons to be used in sale of ice cream, oysters, and other specified commodities	174	137	37
Slot Weighing Machines	1	—	1
Glass Graduates	4	4	—
Ice Cream Cans	3	3	—
Glass Oil Measures	6	3	3
Liquid Measures	52	44	8
Milk Jars	229	217	12
Wood Baskets	2	—	2
Screen Wire Measuring Machines . .	2	—	2
Scales	3	—	3
Totals	476	408	68

MISCELLANEOUS TESTS.

Test Measures for Gasoline Pumps	113	113	—
Avoirdupois Weights	24	24	—
Berry Baskets	22	21	1
Milk Cans	6	6	—
Slide Rule	1	1	—
Scales	3	2	1
Miscellaneous Packages	15	12	3
Totals	184	179	5

One manufacturer's clinical standard thermometer was inspected and approved; 10 metal rings used in determining sizes of apples were tested and verified for the Department of Agriculture; 5 packages of toilet paper were examined and count verified for the Purchasing Division; 3 test sheets were verified for use in calibrating leather-measuring machines; 40,601 yards of sewing thread were measured for clothing manufacturers; and hammer, shot and discus used in college athletics were weighed and officially certified.

FIELD WORK OF INSPECTORS.

The following tabulation illustrates, to some extent, the character of the activities of the inspectors. Much of the inspectors' work is of a nature which cannot be adequately described or understood through a compilation of statistics. Their duties include the instruction of local sealers of weights and measures and supervision of their work. Year after year attention has been called to the frequent changes which occur in the office of sealer in towns of less than 10,000 inhabitants, where the position has not been placed in the classified civil service. During the past year 37 new sealers have been appointed in such towns, an overturn of 13 per cent, involving an unnecessary expenditure of time and money by the Commonwealth in instructing new appointees who are more than likely to be superseded in turn following the next town elections. This condition is likely to continue until such time as the General Court enacts legislation ensuring a more permanent tenure of office to sealers in towns having a population of less than 10,000.

To facilitate the work, the Director has established definite districts throughout the State, an Inspector being assigned to each and held responsible for the enforcement of the weights and measures and license laws in his district. The Division maintains five Oakland cars by means of which the Inspectors are enabled to travel quickly and economically, and to make periodical visits to remote towns which are difficult of access because of the absence of railroad or other public transportation facilities. These cars covered a total of 50,882 miles during the year at an average cost of three cents per mile, this cost not including depreciation and no insurance being carried on the cars.

The following compilation shows some phases of the work performed by the Inspectors:—

Number of Inspections.—Stores, 1659; Gasoline Pumps, 268; Pedlers, 343; Transient Vendors, 499; Reweighing and Marking of Packages, 230; Miscellaneous, 116. Total, 3115.

Weighing and Measuring Devices.—Sealed, 9,000; Unsealed, 1,536; Total Number Inspected, 10,536; Accurate, 1,726; Inaccurate, 248; Total Number Tested, 1,974.

Clinical Thermometers.—Sealed, 3,426; Unsealed, 209; Total Number Inspected, 3,635.

Reweighings.

COMMODITY.	Number.	Correct.	Under.*	Over.*
Miscellaneous Packages	7,888	2,873	2,631	2,384
Coal (in Paper Bags)	90	40	23	27
Coal (Loads)	55	4	19	32
Totals	8,033	2,917	2,673	2,443

*Many of these reweighings were made by Inspectors upon precision balances capable of showing slight variations from correct weight not readily apparent when commercial scales are used. When conditions warranted, dealers were admonished to use greater care in weighing; and the place was noted for future reinspection.

State Institutions.

ARTICLE.	Number Tested.	Ad-justed.	Sealed.	Con-demned.
Scales	751	76	688	63
Weights	2,897	119	2,856	41
Gasoline Pumps	27	2	15	12
Linear Measures	10	—	10	—
Liquid Measures	8	—	8	—
Totals	3,693	197	3,577	116

Specific complaints were received and investigated in 35 instances. Six of these involved quality of coal and samples were secured from consumers' bins and submitted to the Department of Health for analyses. Lapse of time between delivery of coal and receipt of complaint in these cases precluded securing samples which might be considered as truly representative of the whole lot delivered and made prosecution impracticable even when analysis showed an excessive amount of impurities. The majority of other complaints involved violations of the transient vendors and hawkers and pedlers license laws. Prosecutions are recorded under the appropriate heading.

During the year 36 applicants for certificates of fitness for appointment as measurers of leather were examined. Certificates were issued to 21 of these applicants, the other 15 failing to qualify.

PROSECUTIONS.

There were 79 complaints presented in the courts by inspectors of this Division, including 47 for violation of the transient vendors' license law, of which 18 were continued for sentence or filed, conditional upon the defendants securing the necessary license in each case. Other prosecutions were as follows:—Giving insufficient weight coal, 3; giving insufficient measure of blueberries (at wholesale), 1; selling vegetables otherwise than by weight, 1; using false scale, 1; using unsealed scales and measures, 2; failure to provide scale on ice wagon, 1; peddling without license, 18; peddling under another's license, 1; failure to display pedlers' license plates upon vehicle, 3. Convictions were secured in 72 cases, while 4 were discharged and 3 pleaded *nolo contendere*. Fines to the amount of \$527.00 were imposed and one case was filled upon payment of \$20.00 costs.

OFFICE WORK.

Hearings were given as required by Section 184, Chapter 94, General Laws, to 12 firms and individuals charged with failure to plainly and conspicuously mark the quantity of contents upon packages containing food. Hearings were also given to 21 baking concerns for failure to mark loaves of bread of other than standard weight as required by Section 9, Chapter 94. All of these complaints were filed upon agreement of the defendants to comply with lawful requirements in future. As in the past the en-

forcement of the legal requirements governing the marking of food packages was greatly facilitated by exchanging reports of improperly marked packages with the Boston station of the United States Food and Drugs Inspection Division, thus avoiding duplication of effort. Similar co-operation has been carried out with the Department of Public Health and the Commission on the Necessaries of Life.

The sum of \$101,316.65 was received from all sources, including fees for hawkers' and pedlers' and transient vendors' licenses, and for the testing of clinical thermometers. Cash to the amount of \$6,500 was deposited, and surety bonds amounting to \$349,000 were filed with the Director by applicants for transient vendors' licenses, to be subject to legal claims arising from business to be conducted under these licenses. The financial statement appearing elsewhere in this report includes the details of all receipts and disbursements.

Weighing and measuring devices to the number of 29 were submitted under Chapter 72, Acts of 1925, which requires the Director to "examine such device to determine whether or not its construction is such as to ensure reasonably permanent accuracy and whether or not it may be used to facilitate the perpetration of fraud, approving or disapproving it accordingly." Of the devices submitted 20 were approved, 3 disapproved, and 6 are under consideration at this time.

The establishment of standard sizes for anthracite coal as required by Chapter 382, Acts of 1926, is fully outlined in the preceding pages.

LICENSES.

Transient Vendors.

Transient Vendors' State Licenses to the number of 711 were issued and fees amounting to \$17,775, collected from this source, as compared with 681 licenses and fees of \$17,025 in 1925. The enforcement of this statutory requirement necessitated 47 prosecutions, the defendants being chiefly operators of roadside stands and other forms of summer seasonal business.

Each applicant for a transient vendors' license was required to file a surety bond in the amount of \$500 or to deposit cash in that amount with the Director. The statute provides that such bonds or deposits may be put in suit by any creditor whose claim arises in connection with the business conducted under the license. Surety bonds in the amount of \$349,000 and cash deposits of \$6,500 were held by the Director. Notices of 10 such claims have been filed with him during the year, preliminary to bringing suit against the licensees and their securities.

Hawkers and Pedlers.

There was a decrease of 119 in the number of hawkers and pedlers licenses for which fees were received during the year, various causes contributing to this decrease. During times of temporary unemployment some persons engage in peddling as an emergency source of income, returning to productive industry when opportunity offers. Others, after securing a number of customers, establish stores and leave the itinerant class. There are also others who travel about carrying their wares in closed automobiles thus successfully disguising their activities and evading license requirements until caught in the act of peddling without license. The passage of ordinances and by-laws providing for local licensing of pedlers of fruits, vegetables and fish in various cities and towns also afforded the opportunity for some to work under such licenses instead of the State license which they formerly used. There were 314 Disabled Veterans' licenses issued without fee, an increase of 105 over last year, so that the actual decrease in the number of pedlers licensed this year was only fourteen.

EDUCATIONAL AND CO-OPERATIVE ACTIVITIES.

As usual this division has issued bulletins and other printed matter at

such intervals as were considered best calculated to inform sealers and other interested parties relative to current legislation, regulatory announcements and court decisions. Many queries from students and teachers of home economics were received and answered. On April 22, Inspector Maurice F. Gloster addressed the Chicopee Kiwanians upon the general subject of "Weights and Measures." On May 4, Inspector L. D. F. Marston addressed the New Bedford Bakers' Association on "Bread Weights and Proper Marking of Loaves," and on August 8, Inspector William Bradley addressed the Italian Master Bakers' Association of Boston and vicinity upon the same subject.

Informal regional meetings of sealers were held at Wrentham, July 13, at Greenfield, August 23, and at Lawrence, September 10. All of these meetings were well attended by sealers of towns in the vicinity of the meeting-places and questions arising in the course of their work were answered by the Director and inspectors who were assigned to each meeting for this purpose. The Director and all inspectors were in constant attendance at the annual convention of the Massachusetts Association of Sealers of Weights and Measures, held at Hyannis, October 8 and 9. One of the features of this convention was the contest open to eighth grade pupils of the schools of the town where the convention was held, who submitted essays upon the subject of "The Value of a Sealer of Weights and Measures to a Community." Suitable prizes were awarded and this contest proved so interesting and instructive that this feature will be continued in future conventions. Upon invitation of Dr. S. W. Stratton, President of the Massachusetts Institute of Technology, the annual convention for 1927 will be held at that institution where the sealers in attendance will have an opportunity to realize the importance of precise weights and measures in the solution of mechanical and scientific problems as well as in the more prosaic commercial pursuits.

LOCAL SEALERS OF WEIGHTS AND MEASURES.

Following is a summary of work performed by sealers of weights and measures in cities and towns as compiled from the annual reports which all sealers are required by section 37, chapter 98, General Laws, to file with the Director between the first and tenth of December in each year. Whatever work may have been performed in the following towns is necessarily omitted from this compilation as the sealer in these towns failed to file a report in accordance with the statutory requirement:

Auburn, Billerica, Blackstone,* Cheshire, Chesterfield, Egremont,* Gay Head,* Gosnold, Granby,* Halifax, Hubbardston, Merrimac, Middlefield, Millville*, Monroe, Mount Washington,* New Braintree*, Rutland, Sherborn*, Tolland,* Tyngham*, Washington and West Stockbridge. In the towns indicated by an Asterisk the sealer also failed to file annual report in 1925.

SUMMARY OF LOCAL SEALERS' WORK.

<i>Scales.</i>	ARTICLE.	Ad-justed.	Sealed.	Non-sealed.	Con-demned.
Platform (5,000 pounds or over)		399	2,854	50	225
Platform (100 to 5,000 pounds)		5,472	26,027	754	1,093
Counter (100 pounds or over)		219	1,834	56	80
Counter (under 100 pounds)		2,509	19,561	391	471
Beam (100 pounds or over)		168	1,717	57	97
Beam (under 100 pounds)		73	965	28	29
Spring (100 pounds or over)		298	5,225	21	772
Spring (under 100 pounds)		3,590	27,797	234	1,939
Computing (100 pounds or over)		74	498	3	13
Computing (under 100 pounds)		4,313	22,409	182	1,341
Personal Weighing (slot)		—	3,065	—	259
Prescription		114	1,563	80	54

SUMMARY OF LOCAL SEALERS' WORK (Continued).

	ARTICLE.	Ad-justed.	Sealed.	Non-sealed.	Con-demned.
<i>Scales.</i>					
Jewellers'	.	2	139	12	7
Miscellaneous	.	—	1,079	—	104
Totals	.	17,231	14,733	1,868	6,484
<i>Weights.</i>					
Avoirdupois	.	8,474	75,961	910	827
Apothecary	.	242	20,428	—	447
Metric	.	102	8,138	594	99
Troy	.	36	2,041	44	12
Totals	.	8,854	106,568	1,548	1,385
<i>Measures.</i>					
Dry	.	—	1,052	—	49
Liquid	.	161	50,243	402	1,199
Yard Measures	.	—	8,758	—	297
Tapes	.	—	224	—	8
Glass Graduates	.	—	661	—	110
Ice Cream Cans	.	139	3,362	—	176
Fuel Baskets	.	—	2,642	—	61
Totals	.	300	66,942	402	1,900
<i>Automatic Measuring Devices.</i>					
Gasoline Pumps	.	4,217	19,158	346	989
Gasoline Meters	.	—	395	—	50
Kerosine Pumps	.	185	2,976	96	81
Oil Pumps (lubricating, etc.)	.	821	7,265	2,651	286
Molasses Pumps	.	5	517	142	20
Quantity Stops (on measuring pumps)	.	9,605	87,429	542	238
Leather-Measuring Machines	.	—	542	—	238
Cloth-Measuring Machines	.	—	752	—	33
Taximeters	.	—	3,327	—	174
Totals	.	14,833	22,361	3,777	2,109
Sealing Fees Collected	\$52,172.55				
Adjusting Charges	4,866.38				
Total Collected	\$57,038.93				

Reweighings and Remeasurements.

COMMODITY.	Number of Reweigh- ings, etc.	Correct.	Under.	Over.
Bread	34,588	20,740	4,127	9,721
Butter	16,066	11,725	2,217	2,124
Charcoal (in paper bags)	1,367	1,314	26	27
Coal (loads)	1,400	625	225	550
Coal (in paper bags)	12,332	5,655	2,028	4,649
Coke (in paper bags)	1,534	1,409	20	105
Confectionery	5,730	5,030	158	542
Dry Commodities (groceries, etc.)	34,750	28,893	2,883	2,974
Dry Goods	207	139	51	17
Flour	9,029	5,733	1,558	1,738
Fruits and Vegetables	12,053	8,176	1,753	2,124
Grain and Feed	1,248	969	95	184
Hay	583	340	196	47
Ice	1,288	652	272	364

Liquid Commodities	5,459	3,729	857	873
Meats and Provisions	8,839	7,345	702	792
Wood (cord)	326	271	35	20
Wood (kindling)	733	636	64	33
Wood (in paper bags)	3,769	3,705	39	25
Miscellaneous	3,367	2,656	586	125
Totals	54,658	9,742	17,892	27,034

Sealers' annual reports also show other activities including the weighing of 2,244 loads of coal, hay, grain, crushed stone, gravel and other materials for municipal departments; inspections of 9,643 paper and fibre cartons, 3,805 pedlers' licenses, 13,073 milk jars, 2,052 coal weight certificates, 33,056 markings on food packages, 16,499 weight statements on bread, 5,902 wholesale milk cans, 612 transient vendors, 4,089 clinical thermometers, 2,650 pedlers' scales, 1,823 ice scales, 752 junk scales, 18,245 metal ice cream containers and 5,196 other miscellaneous inspections. They also tested 269 Climax baskets, 156 United States standard barrels, 3,154 cartons, 1,111 standard farm produce boxes, 4,731 gasoline measuring devices, 6,209 berry baskets, 6,731 milk jars and 4,908 other miscellaneous containers.

Prosecutions.

NATURE OF OFFENSE	Number of Complaints.	Convicted.	Discharged.	Pleaded Nolo.	Filed.	Sentence Suspended.	Defaulted.	Amount of Fines Imposed.
Giving insufficient weight of bread	4	4	-	-	-	-	-	\$125
Giving insufficient weight of chicken	2	2	-	-	-	-	-	20
Giving insufficient weight of coal	13	12	-	-	1a	1	-	305
Giving insufficient weight of fowl	2	1	1	-	-	-	-	25
Giving insufficient weight of ice	13	16	1	-	-	-	1	465
Giving insufficient weight of meat	2	-	-	1	1	1	1b	-
Giving insufficient weight of meal-fed	2	-	-	-	2c	-	-	-
Giving insufficient weight of potatoes	1	1	-	-	-	-	-	25
Giving insufficient weight (miscellaneous)	15	13	2	-	-	-	-	305
Giving insufficient measure of wood	6	6	-	-	1	-	-	85
Using false scales	3	3	-	-	-	-	-	50
Using unsealed scales	4	4	-	-	-	-	-	56
Using unsealed milk jars	1	1	-	-	1	-	-	-
Interfering with sealer in performance of duty	2	2	-	-	-	-	-	35
Selling vegetables otherwise than by weight or count	2	2	-	-	-	-	-	10
Neglect to provide scales on ice wagon	2	2	-	-	-	-	-	20
Refused to exhibit weighing devices to sealer	1	-	1	-	-	-	-	-
Not posting retail prices of ice on vehicle	1	1	-	-	1	-	-	-
Selling coal unfit for ordinary use	2	2	-	-	1e	-	-	250
Selling coal without weigher's certificate	4	4	-	-	1	-	-	45
Refusing to permit sealer to reweigh coal in transit	1	1	-	-	-	-	-	10
Peddling without license	43	41	-	1	14	2	1	449
Peddling under another's license	1	1	-	-	-	-	-	20
Peddling under expired license	1	1	-	-	-	-	-	20
Conducting transient business without license	5	5	-	-	4f	-	-	10
Totals	138	125	5	2	27	3	3	\$2330

a. Case filed on condition that defendant deliver 2 tons of coal to 5 poor families under direction of deputy sealer.

b. Cash bail of \$50 forfeited.

c. Cases filed upon restitution being made.

d. Restitution of \$9.40 ordered in one case in addition to fine of \$25.

e. Case filed on condition that purchase price be refunded and coal destroyed.

f. Filed upon defendants securing licenses.

FINANCIAL STATEMENT.

Receipts.

1156 State (hawkers' and pedlers') license fees	\$57,800.00
573 City (hawkers' and pedlers') license fees	14,888.00
681 Town (hawkers' and pedlers') license fees	7,714.00
514 County (hawkers' and pedlers') license fees	2,334.00
711 Transient Vendors' license fees	17,775.00
Interest on deposits	296.93
Total receipts from license fees	\$100,807.93
Receipts from fees for testing clinical thermometers	140.91
From sale of standards, etc.	205.50
Accumulation, badge account	162.31
Total	\$101,316.65

Payments to State Treasurer.

1156 State license fees	\$57,800.00
573 City license fees	573.00
681 Town license fees	681.00
514 County license fees	514.00
711 Transient Vendors' license fees	17,775.00
Interest on deposits	296.93
Fees for testing clinical thermometers	140.91
Receipts from sale of standards, etc.	205.50
Accumulation, badge account	162.31
Total payments to State Treasurer	\$78,148.65

Payments to City, Town and County Treasurers on Account of Hawkers' and Pedlers' Licenses.

Cities	\$14,315.00
Towns	7,033.00
Counties	1,820.00
Total	\$101,316.65

Summary.

Appropriation personal services	\$26,000.00
Expended	25,670.00
	\$330.00
Appropriation general expenses	12,200.00
Expended	10,130.58
	\$2,399.42
Total income to Commonwealth from licenses, interest, fees for clinical thermometers, etc.	\$78,148.65
Total expenditures	35,800.58
Excess of income over expenditures	\$42,348.07

REPORT OF THE DIVISION OF STATISTICS

ROSSELL F. PHELPS, *Director.*

The principal branches of the work of the Division of Statistics are the collection and publication of statistics of labor and manufactures, the supervision of the four public employment offices maintained by the Commonwealth, and the answering of special inquiries having reference to conditions in the various industries, rates of wages, hours of labor, and

other matters relating to the welfare of the industrial population. The several branches of the work of the Division during the year ending November 30, 1926 are discussed in this report. Statistical tables, summarizing the results of certain of the more important investigations conducted during the year and the activities of the four public employment offices, are also included. Because of the nature of the data presented, certain of these tables relate to the calendar year rather than to the fiscal year, and data for prior years are presented for purposes of comparison.

1. STATISTICS OF LABOR.

The statistics of labor collected by the Division are published as "Labor Bulletins," each constituting a "Part" of the "Annual Report on the Statistics of Labor." Numerous press notices in mimeographed form, containing the results of regular monthly surveys and special inquiries, are issued for the purpose of making immediately available information of current interest.

Annual Report on the Statistics of Labor (Public Document No. 15).

This report for the year 1926 consists of three "Parts," two of which have been issued and the third is in preparation. The titles of these "Parts" are as follows:

Part I. Sixteenth Annual Report on Time Rates of Wages and Hours of Labor in Massachusetts, 1925 (Labor Bulletin No. 147).

Part II. Twenty-fifth Annual Directory of Labor Organizations in Massachusetts, 1926 (Labor Bulletin No. 148).

Part III. Salaries of Office Employees in Massachusetts, May 1, 1926 (Labor Bulletin No. 149). (In preparation.)

The subject matter of each report is indicated by its title. Parts I and II are regular annual publications. Part III, when issued, will contain the results of an inquiry relative to the salaries of office employees as of May 1, 1926, made in response to frequent requests for information of this character. Returns were received from 1,075 establishments quite widely distributed throughout the State, and covered 22,427 office employees, of whom 8,182 (36.5 per cent) were males and 14,245 (63.5 per cent) were females. In order that the results of this inquiry might become available immediately upon the completion of the tabulations, a summary was issued as a "press release" in mimeographed form, reference to which is made later in this report.¹

Monthly Surveys and Press Notices.

Employment and Earnings. The collection of monthly pay-roll data from representative manufacturing establishments in Massachusetts, first undertaken by this Division in September, 1922, has become a regular branch of its statistical work. In conducting this monthly survey the Division is following the "Standard Plan"² recommended by the Committee on Governmental Labor Statistics of the American Statistical Association, on which Committee the Department is represented by the Director of Statistics. Since the work was undertaken by this Division, it has co-operated with the Federal Bureau of Labor Statistics and has furnished copies of certain of the returns to the Federal Bureau for use in connection with the National survey each month, thereby avoiding duplication in the work of collection of returns by two separate agencies.

The number of manufacturing establishments canvassed each month now exceeds 1,000. For November, 1926, returns were received from 1,064 establishments and represented 246,157 wage-earners, whose weekly earnings amounted to \$6,018,046, or \$24.45 per capita. The number of wage-earners now represented in the monthly survey constitutes some-

¹ See "Salaries of Office Employees" on page 53.

² See Report of this Committee, entitled "Employment Statistics for the United States", published by the Russell Sage Foundation, New York, 1926.

what over 40 per cent of the total number of wage-earners employed in all manufacturing establishments in the State. By careful selection of the establishments canvassed, the returns are weighted so as to be fairly representative by industries, by localities, and by size of establishments. From year to year as the exhaustive returns obtained in connection with the annual census of manufactures in Massachusetts become available, changes are made in the list of establishments canvassed so as to maintain a proper representation in these several respects.

The questionnaire used has purposely been kept very simple in form and includes only a few inquiries, nearly all of which can be answered merely by reference to pay-roll totals. It calls for the total number of wage-earners employed (exclusive of salaried officials, executives and others not employed in "productive departments"); the total amount of their wages during a specified pay-roll period; and certain other information with reference to the hours of operation of the plant and general changes in wage scales explanatory of any marked change in the trend of employment or wages since the date of the last report. Employers are requested to furnish the pay-roll data by sex, where this can readily be done; and for approximately three-fourths of the wage-earners now covered by the monthly survey, the pay-roll data are so classified.

The results of the monthly surveys presented for 39 important industries and 25 leading industrial cities in the State are made public through mimeographed summaries, copies of which are supplied to the press and sent to all of the reporting establishments and to a large number of organizations and individuals desiring them. Not only has there been a steadily increasing interest in these monthly data, but quite frequently requests for information in further detail by industries or cities are received.

Three series of index numbers have been prepared showing, for all industries combined and for each of the principal industries, the trend of employment, of average weekly earnings, and of aggregate weekly earnings, by months in 1924, 1925, and 1926, using as a base for each series the corresponding averages derived from the returns for all manufacturing establishments in the State obtained by the annual census of manufactures during the five-year period 1919-1923. This five-year base period has been found to be more truly representative of normal conditions than any single recent year. The three series of index numbers, for all industries combined, are presented in the following table.¹

*Index Numbers of Employment and Earnings of Wage-Earners in Representative Manufacturing Establishments in Massachusetts,
All Industries: By Months, 1924, 1925, and 1926.*

(Basé:—Annual Census of Manufactures—Average for 1919-1923=100.0)

MONTHS.	EMPLOYMENT			AVERAGE WEEKLY EARNINGS			AGGREGATE WEEKLY EARNINGS		
	1924	1925	1926	1924	1925	1926	1924	1925	1926
January	93.1	88.8	89.1	101.2	100.9	100.9	94.2	89.6	89.9
February	93.1	90.0	90.3	100.9	100.7	101.1	93.9	90.6	91.4
March	92.6	89.6	91.2	99.0	100.6	102.1	91.7	90.1	93.2
April	88.2	88.5	88.9	97.4	98.3	100.0	85.9	87.0	89.0
May	84.4	86.6	86.6	96.4	98.7	99.8	81.4	85.5	86.5
June	82.0	84.1	83.9	95.1	97.4	99.1	78.0	81.9	83.2
July	78.5	83.0	79.0	95.4	99.7	99.0	74.9	82.8	78.1
August	80.9	84.7	82.4	97.1	100.0	100.4	78.5	84.7	82.6
September	83.5	86.2	85.5	98.7	99.7	100.5	82.4	85.9	85.8
October	86.7	88.4	86.3	99.6	101.5	100.0	86.3	89.7	86.1
November	87.1	89.3	86.1	100.0	100.4	100.9	87.1	89.6	86.7
December	87.6	88.9	85.0	101.2	100.4	100.7	88.6	89.2	85.4
<i>Average for the year.</i>	<i>86.5</i>	<i>87.3</i>	<i>86.2</i>	<i>98.5</i>	<i>99.9</i>	<i>100.4</i>	<i>85.2</i>	<i>87.2</i>	<i>86.6</i>

¹ The publication of the results of the MONTHLY SURVEY OF EMPLOYMENT AND EARNINGS for the four years, 1923-1926, as a special report is under consideration, and for this reason the complete series of index numbers by industries and cities are not included in this report.

The index numbers presented in the foregoing table show the trend of employment and earnings of employees during the three-year period, 1924-1926, in the manufacturing industries in Massachusetts, considered as a single group. Based on the average for the five-year period considered as normal, employment during each of the three years 1924, 1925, and 1926 has been continuously below normal, and during the three-year period there were no marked fluctuations either upward or downward, other than those of a seasonal nature. The *average* weekly earnings of those employed, however, have remained at a high level during the entire period, and during the year 1926 remained practically stationary; but the trend of *aggregate* weekly earnings has followed closely the trend of employment for the reason that the actual weekly earnings of those employed have not changed materially.

Building Statistics. At the close of each month building department officials in each of the 39 cities of the Commonwealth report to the Department on a prescribed form the number of permits granted for the erection of new residential and new non-residential structures and their estimated cost, by types of structures and their intended use; the number of family accommodations to be provided in new housekeeping dwellings; and the number of buildings to be added to, altered, or repaired, with an estimate of the cost of such work.

The information thus obtained is made public in the form of mimeographed press releases, in which the data are presented by cities and by types of construction. Attention is called in the text of these monthly reports to variations in the amount of construction work to be undertaken, and items of particular interest, such as large individual projects, receive special mention. Because of the scarcity of house-keeping dwellings for several years past, the records relative to the proposed erection of new dwellings have commanded much interest. These reports are given wide publicity in the daily newspapers and trade periodicals, and are sent currently to a large list of individuals who are interested in the real estate market. With such information in hand it is possible to answer the many inquiries received relative to activity in the building trades.

Comparable data for the 39 cities in Massachusetts for the years 1924, 1925 and 1926 are presented in the following table.

*Number and Estimated Cost of Buildings for which Applications Were Filed for Permits to Build in the 39 Cities in Massachusetts:
By Years, 1924-1926.*

TYPE OF CONSTRUCTION.	1924	1925	1926
	Number of Buildings		
Totals	44,731	43,531	38,098
New residential buildings . . .	10,026	11,795	9,159
New non-residential buildings . .	17,250	16,084	13,091
Additions, alterations and repairs	17,455	15,652	15,848
Estimated Cost of Buildings			
Totals	\$176,206,316	\$209,146,270	\$156,173,678
New residential buildings . . .	88,624,299	117,366,488	79,026,088
New non-residential buildings . .	60,402,309	67,681,423	52,963,694
Additions, alterations and repairs	27,179,708	24,098,359	24,183,896

For all types of building construction combined, the number of permits granted in 1926 in the 39 cities in Massachusetts was 38,098, or 12.5 per cent less than the corresponding number (43,531) granted in 1925, and the estimated cost in 1926 was \$156,173,678, or 25.3 per cent less than the estimated cost in 1925 (\$209,146,270). To a large extent this decrease was due to less activity in the construction of *new residential* dwellings, the number of permits for which was 9,159, or 22.3 per cent less than the number (11,795) granted in 1925, and the estimated cost of which in

1926 was \$79,026,088, or 32.7 per cent less than the estimated cost (\$117,366,488) in 1925. In 1926, the estimated cost of new residential buildings proposed constituted 50.6 per cent of the aggregate for all classes of buildings, as compared with 56.1 per cent in 1925. There was also a large decrease in the number and estimated cost of *new non-residential* buildings for which permits were granted in 1926 when compared with the corresponding number and estimated cost in 1925, but with reference to additions, alterations and repairs, small increases were noted in 1926 over 1925, both in number of permits applied for and in the estimated cost of the work. These comparisons indicate that the supply of new buildings, both residential and non-residential, has increased during several years of unusual building activity and now more adequately meets the demand.

Data for individual cities for 1926, classified by types of construction, with totals for 1925 for comparison, are presented in the following table:

Estimated Cost of Prospective Building in Each of the 39 Cities in Massachusetts in 1926 and 1925: By Classes of Projects.

CITIES	1926			1925	
	New Buildings Residential	Non- Residential	Additions Alterations and Repairs	Totals All Classes of Projects	Totals All Classes of Projects
<i>Totals, 39 Cities</i>	<i>\$79,026,088</i>	<i>\$52,963,694</i>	<i>\$24,183,896</i>	<i>\$156,173,678</i>	<i>\$209,146,270</i>
Atleboro	405,950	320,942	70,190	797,082	1,205,672
Beverly	542,800	159,119	208,220	910,139	829,964
Boston	21,544,788	19,795,089	10,144,527	51,484,404	70,718,364
Brookton	755,500	678,735	445,170	1,879,405	1,810,012
Cambridge	4,710,000	2,478,228	1,302,417	8,490,645	11,778,731
Chelsea	624,500	266,755	221,444	1,112,699	1,091,475
Chicopee	924,600	530,575	86,685	1,541,860	3,663,785
Everett	1,800,000	1,589,740	97,515	3,487,255	2,150,800
Fall River	919,150	563,288	673,703	2,156,141	3,772,090
Fitchburg	606,650	801,745	143,993	1,557,388	2,127,714
Gardner	637,475	538,250	87,610	1,263,335	1,009,363
Gloucester	567,370	250,736	145,380	963,486	548,551
Haverhill	452,900	264,240	127,575	844,715	667,050
Holyoke	1,187,600	1,033,725	385,800	2,607,125	3,493,050
Lawrence	623,500	853,059	359,583	1,841,142	2,896,595
Leominster	287,700	197,550	49,450	484,700	873,050
Lowell	488,100	727,370	361,665	1,577,635	2,427,129
Lynn	2,626,615	747,845	1,237,635	4,612,145	4,675,293
Malden	1,927,310	1,503,030	384,016	3,614,356	2,957,886
Marlborough	127,500	168,450	83,950	379,900	944,200
Medford	4,147,650	1,298,975	195,480	5,642,105	5,603,775
Melrose	1,359,600	458,915	117,920	1,936,435	1,828,349
New Bedford	768,000	1,240,825	303,130	2,311,955	8,329,100
Newburyport	77,200	87,050	91,400	255,650	265,250
Newton	6,000,350	1,715,530	678,074	8,393,954	12,297,313
North Adams	125,720	59,155	202,314	387,189	440,312
Northampton	748,350	242,350	151,110	1,142,310	1,506,675
Peabody	519,375	347,195	61,675	928,245	1,022,720
Pittsfield	801,800	282,345	412,950	1,497,595	2,718,754
Quincy	4,570,274	1,272,995	397,392	6,240,661	8,043,108
Revere	1,053,800	391,790	247,597	1,693,187	1,319,785
Salem	1,122,000	580,175	403,950	2,106,125	2,157,105
Somerville	1,483,500	3,156,546	736,045	5,376,091	5,602,980
Springfield	5,239,905	2,273,067	1,223,734	8,736,706	15,016,780
Taunton	417,970	201,812	139,962	759,744	967,937
Waltham	1,644,450	924,052	284,707	2,853,209	2,679,131
Westfield	422,886	329,533	113,792	866,211	1,022,500
Woburn	286,850	234,080	35,775	556,705	595,008
Worcester	6,521,400	4,597,333	1,765,311	12,884,044	13,088,909

The total value of all classes of projects in the 39 cities combined, in 1926 was \$156,173,678, nearly one third of which was represented by the total for Boston (\$51,484,404). In each of seven other cities (Cambridge, Medford, Newton, Quincy, Somerville, Springfield, and Worcester) the value of proposed construction work exceeded \$5,000,000. These eight cities together represented \$107,248,610, or a little more than two thirds of the entire amount of building in prospect in the 39 cities. In seven of these eight cities there were decreases in the total values reported in 1926 as compared with those in 1925, as follows: Boston, 27.2 per cent; Cambridge, 27.9 percent; Newton, 31.7 per cent; Quincy, 22.4 per cent; Somerville, 4.0 per cent; Springfield, 41.8 per cent; and Worcester, 28.8 per cent.

In eleven of the 39 cities the estimated cost of buildings in 1926 exceeded the corresponding estimate in 1925. These eleven cities, and the percentage increases in 1926 over 1925 were: Beverly, 9.7 per cent; Brockton, 3.8 per cent; Chelsea, 1.9 per cent; Everett, 62.2 per cent; Gardner, 25.2 per cent; Gloucester, 75.6 per cent; Haverhill, 26.6 per cent; Malden, 22.2 per cent; Medford, 0.7 per cent; Melrose, 5.9 per cent; and Waltham, 6.5 per cent.

For the 39 cities, combined, the estimated cost of new residential buildings constituted 50.6 per cent of the aggregate for all classes of buildings. In the following cities, where the erection of residential buildings was a very important factor in the building program, the estimated cost of residential buildings constituted 60 per cent or more of the aggregate for all classes of buildings: Medford, 74.0 per cent; Quincy, 73.2 per cent; Newton, 71.5 per cent; Melrose, 70.2 per cent; Northampton, 65.5 per cent; Revere, 62.2 per cent; Chicopee, 60.0 per cent; and Springfield, 60.0 per cent.

Data are presented in the following table, showing for 1926 and 1925, the number of applications for permits for the erection of new house-keeping dwellings, the estimated cost thereof, and the number of family accommodations provided in each of the 39 cities in the State.

Number and Estimated Cost of New Housekeeping Dwellings Planned and Number of Accommodations Provided in Each of the 39 Cities in Massachusetts in 1926 and 1925.

CITIES	1926			1925		
	Number of New House-keeping Dwellings	Estimated Cost of New House-keeping Dwellings	Number of Family Accommodations Provided	Number of New House-keeping Dwellings	Estimated Cost of New House-keeping Dwellings	Number of Family Accommodations Provided
<i>Totals, 39 Cities</i>	<i>9,141</i>	<i>\$74,265,564</i>	<i>15,886</i>	<i>11,758</i>	<i>\$103,509,733</i>	<i>21,988</i>
Attleboro	88	405,950	123	81	368,000	97
Beverly	87	542,800	98	88	484,780	99
Boston	1,729	18,021,788	3,882	2,027	27,892,598	5,942
Brockton	148	755,500	151	184	969,850	195
Cambridge	172	4,710,000	878	219	4,621,840	845
Chelsea	69	624,500	163	60	511,000	118
Chicopee	167	924,600	243	393	2,727,100	754
Everett	231	1,800,000	484	170	1,264,100	343
Fall River	167	919,150	232	412	2,399,260	607
Fitchburg	116	606,650	148	191	1,132,850	284
Gardner	113	637,475	138	113	584,235	125
Gloucester	67	567,370	81	71	332,391	73
Haverhill	91	452,900	110	67	307,700	74
Holyoke	97	1,187,600	197	175	2,037,300	320
Lawrence	68	618,500	154	112	1,123,100	306
Leominster	42	237,700	67	76	437,500	119
Lowell	127	488,100	145	260	1,164,750	320
Lynn	312	2,626,615	608	313	2,662,850	666
Malden	273	1,927,310	426	210	1,757,050	399
Marlborough	24	127,500	26	62	327,100	69
Medford	573	3,947,650	869	527	4,178,400	825
Melrose	186	1,359,600	198	188	1,305,700	203
New Bedford	106	768,000	133	517	4,523,500	981
Newburyport	13	77,200	17	15	78,200	15
Newton	548	5,980,350	692	786	9,529,990	1,033
North Adams	38	125,720	38	42	192,442	43
Northampton	65	398,350	69	91	528,550	104
Peabody	82	519,375	100	105	735,200	137
Pittsfield	100	801,800	120	216	1,637,000	284
Quincy	750	4,187,750	1,009	925	5,132,050	1,217
Revere	148	1,053,800	261	175	874,190	227
Salem	100	1,122,000	169	98	1,070,000	167
Somerville	136	1,483,500	352	156	2,384,300	554
Springfield	759	4,989,905	1,410	977	6,359,750	1,924
Taunton	100	417,970	111	139	627,797	163
Waltham	200	1,644,450	345	273	1,771,150	384
Westfield	92	422,886	104	112	484,225	129
Woburn	68	286,850	70	88	424,100	102
Worcester	898	6,496,400	1,465	1,044	8,567,840	1,741

It is evident that there was a decided decrease in the construction of housekeeping dwellings in all but a few of the leading cities in Massachusetts. In Boston, in 1926, the number of new dwellings was 14.7 per

cent less than the corresponding number in 1925, the estimated cost was 35.4 per cent less and the number of family accommodations provided, 34.7 per cent less. The city of Newton, second in importance with respect to the cost of new dwellings in 1925, showed a marked decrease in 1926, the cost in that year being 37.2 per cent less than in 1925. In Worcester, the value of the 1926 projects was 24.2 per cent less than the value represented by similar projects in 1925. Springfield showed a like condition, as did Quincy. The best relative showing was made by Everett where the number of buildings in 1926 was 35.9 per cent more than in 1925, the estimated cost 42.4 per cent more, and the number of family accommodations 41.1 per cent more. Revere showed a gain of 20.5 per cent in the cost of new dwellings and a gain of 14.9 per cent in the number of family accommodations, although fewer buildings were planned. In the textile centers where business conditions have been adverse, such as Fall River, Lawrence, Lowell, and New Bedford, a decided curtailment occurred in the building of residences.

Of the total estimated cost of new non-residential buildings planned in the 39 cities in 1926, 83.7 per cent was represented in seven classes of buildings, in the order named: Stores and other mercantile buildings; factories and other workshops; public garages; office buildings, including banks; schools; private garages; and institutions.

Salaries of Office Employees in Massachusetts, May 1, 1926.

In order to answer frequent requests for information relative to salaries of office employees in the various establishments in Massachusetts, the Division obtained from a large number of employers in Boston and 18 other municipalities in the State data, by sex of employees, as of May 1, 1926.¹ Returns were received from 1,075 establishments in which were employed 22,427 office employees (about one-eighth of all office employees in the State) of whom 8,182, or 36.5 per cent, were males and 14,245, or 63.5 per cent were females. These returns were tabulated separately, for Boston and four State Districts, by types of offices, or "Office Groups," as follows:

Banks and Trust Companies.
 Brokerage, Investment, and Loan Companies.
 Dealers, and Sales Agencies.
 Department and Specialty Stores.
 Insurance Companies and Agencies.
 Manufacturing Establishments.
 Printing and Publishing Establishments.
 Miscellaneous Companies.

The detailed tables show by sex, the number of office employees receiving salaries within specified "salary groups." The following summary shows for the 22,427 office employees covered by this survey, the percentage distribution, by salary groups and by sex, of those employed in four general classes of service:

Percentage Distribution of Office Employees, By Salary Groups, May 1, 1926.

OFFICE EMPLOYEES RECEIVING, PER WEEK—

SEX	\$16 \$20 \$25 \$30 \$40 but but but but but Less less less less less						Totals
	than	than	than	than	than	\$50	
	\$16	\$20	\$25	\$30	\$40	\$50	All or Salary Groups
<i>All Employees Represented</i>							
Males and Females	11.0	18.3	24.6	17.3	15.7	6.0	7.0 100.0
Males	6.4	7.3	11.7	14.7	27.7	13.9	18.3 100.0
Females	13.7	24.7	32.0	18.8	8.8	1.5	.5 100.0

¹ A similar survey was made as of May 1, 1925, but this was confined to the City of Boston, and no attempt was then made to obtain data for males and females separately.

OFFICE EMPLOYEES RECEIVING, PER WEEK—*Continued*

SEX	\$16 Less than \$16	\$20 but less than \$20	\$25 but less than \$25	\$30 but less than \$30	\$40 but less than \$40	\$50 but less than \$50	\$50 or over	Totals All Salary Groups
	\$16	\$20	\$25	\$30	\$40	\$50		
<i>Clerical Service</i>								
Males and Females	13.4	18.5	20.2	14.2	16.1	7.4	10.2	100.0
Males	7.5	7.7	11.7	14.3	25.7	13.5	19.6	100.0
Females	19.4	29.4	28.7	13.9	6.5	1.4	.7	100.0
<i>Stenographic Service</i>								
Males and Females	8.5	19.4	33.9	24.4	11.3	1.9	.6	100.0
Males	7.3	13.5	12.4	19.7	28.0	11.4	7.8	100.0
Females	8.6	19.6	34.8	24.6	10.6	1.5	.3	100.0
<i>Accounting and Bookkeeping Service</i>								
Males and Females	6.2	15.1	25.4	18.6	20.1	7.5	6.9	100.0
Males	1.4	4.3	9.7	14.6	35.2	17.1	17.8	100.0
Females	9.0	21.3	34.5	20.9	11.5	2.1	.7	100.0
<i>Operation of Office Appliances</i>								
Males and Females	20.9	29.8	27.9	13.6	7.3	.5	—	100.0
Males	16.0	15.6	25.8	21.5	19.5	1.6	—	100.0
Females	23.2	36.4	28.9	9.9	1.6	—	—	100.0

The results of this survey were made public by a brief announcement to the press and to all employers who had furnished returns, and by a later mimeographed report of 16 pages in which data in summary form were presented with accompanying text. This report was mailed to a large number of persons requesting it. A more complete report to be issued in print as Part III of the Annual Report on the Statistics of Labor, 1926, is in preparation.

Record of Industrial Disputes.

Information with reference to industrial disputes resulting in strikes occurring within the Commonwealth is secured from various sources and entered in a permanent record book provided for this purpose. This information is primarily for the use of the State Board of Conciliation and Arbitration but is also available to the public for reference.

During the year 1926 a total of 65 strikes occurred in Massachusetts in which 20,615 employees were either directly or indirectly involved, as compared with 69 disputes affecting 22,729 employees in 1925. The question of wages entered wholly or largely into more than a majority of the controversies.

Of the 20,615 persons affected, 7,070 were involved in seven clothing and garment trades disputes. Six of these disputes were in Boston establishments and included a strike of 4,000 members of the Ladies' Garment Workers Union who sought more sanitary working conditions in all shops in which they were employed; a strike of 1,000 union waterproof-garment workers who sought a wage increase and certain changes in conditions of employment; a strike of 900 union fur workers, for a wage increase and for the adoption of a basic five-day week for the industry; and a strike of 700 union men's clothing workers who sought an upward adjustment of piece-work prices.

There were 13 strikes in the textile industry, affecting 6,046 employees. One of the more important disputes involved about 1,800 employees of the Berkshire Cotton Mills, Adams, who struck to secure the reinstatement of speeder tenders who had protested a change in working conditions. A second important dispute affected 1,500 employees of the Dart-

mouth Mills, New Bedford, who were out on strike in protest against certain conditions of employment. A question of unionism of certain employees of the Parker Mills, East Warren, caused a strike of 100 weavers, and resulted in the closing down of the entire plant in which about 500 were employed. A strike of 100 weavers, employed in the mills of the Barnard Manufacturing Company, Fall River, brought about the closing of the mills, and affected, all together, 750 employees. Piece prices on a certain operation were in dispute.

There were 17 disputes in the building trades, affecting 1,768 persons; 11 in the boot and shoe industry, affecting 1,585; and 17 in other industries, affecting 4,146. Included in the latter group were two important controversies, one a general strike of about 1,800 cigar makers who sought an upward revision of piece-work price lists in Boston, and the other a strike involving 1,175 employees of the Firestone-Apsley Rubber Company, Hudson, which strike resulted from a disagreement over prices to be paid employees engaged on a new line of goods.

Information Service.

Numerous inquiries are received by this office for information relative to labor and industrial subjects, such as rates of wages and conditions of employment, production, earnings, employment, building statistics, office salaries and other matters of industrial and economic interest. An endeavor is made to answer these inquiries by reference to original data on file or to secondary sources. In some cases special tabulations are made and occasionally special inquiries are conducted in order to supply information requested.

A reference library, maintained primarily for the use of officials of the Department, is of service also to those who call in person for information. Two employees of the Division are employed in the library in answering inquiries, and in filing reports and other publications relating to labor and industrial topics. Reports are regularly exchanged with labor departments in other States, with the various departments of the United States Government, with certain foreign countries, and with a number of industrial research organizations, and the more important industrial and trade journals and trade union publications are obtained for reference purposes.

There are received currently 15 daily newspapers, and 31 weekly, 19 bi-weekly, 180 monthly, and 15 quarterly publications. The newspapers and periodicals are examined as received and items of industrial interest are clipped and referred to the officials of the Department, or filed for future reference. During the past year many of the inquiries received at the library referred to the following subjects: Labor banks, old age pensions, unemployment insurance, labor legislation, the safety movement, the five-day week in industry, and various other subjects. A special collection of catalogues on machinery safe-guards was made for the use of one of the Divisions of the Department.

2. STATISTICS OF MANUFACTURES.

Annual Report of the Statistics of Manufactures (Public Document No. 36).

The census of manufactures in Massachusetts for the year 1925 was taken in 1926 in co-operation with the United States Bureau of the Census, thereby avoiding duplication of a considerable amount of field work and office work. A saving to this Department of approximately \$4,300 on account of salaries and traveling expenses of field agents, postage, printing and other contingent expenses was effected by this plan of co-operation. The field work in Massachusetts was under the immediate supervision of the Director of Statistics, acting as Expert Special Agent for the Federal Bureau. The schedules furnished by the Census Bureau

were used jointly and the franking privilege was granted in connection with this work. The original returns received from manufacturers were forwarded to the Federal Bureau, after copies were made for the use of this Department.

The tabulations of the returns by industries for the State as a whole are being made at Washington, but in order to make public as soon as possible the data for cities and principal industries therein, special tabulations have been made by the Division of Statistics; and the data for 1925, with comparable data for each of the four years, 1921 to 1924, have been issued in the form of mimeographed press notices¹ for each of the 39 cities, for the State as a whole, and for Metropolitan Boston.

The returns for 1925 covered 10,141 manufacturing establishments. The results of the *preliminary* tabulations for all manufacturing industries combined, with comparable data for the year, 1924 are presented in the following table:

Principal Data—All Manufacturing Industries Combined: 1925 and 1924.

ITEMS.	1925	1924	Per Cent	
			In-	crease
Number of establishments	10,141	10,174	—33 ¹	—0.32 ¹
Value of products	\$3,451,378,504	\$3,126,137,145	\$325,241,359	9.42
Value of stock and materials used	\$1,813,151,139	\$1,629,342,134	\$183,809,005	10.14
Value added by manufacture	\$1,638,227,365	\$1,496,795,011	\$141,432,354	8.63
Total amount paid in wages	\$718,928,078	\$711,812,104	\$7,115,974	0.99
Average number of wage-earners	593,193	589,364	3,829	0.65
Average yearly earnings	\$1,211.96	\$1,207.76	\$4.20	0.35

¹ Decrease.

The total value of products manufactured in Massachusetts during the year 1925 amounted to \$3,451,378,504, showing an increase of \$325,241,359, or 9.42 per cent, over the total for the year, 1924; but this increase was due principally to an increase in the factory selling prices of the products. That there was no large increase in the *volume* of products in 1925 over 1924 is indicated by the fact that the average number of wage-earners employed in the manufacturing industries in 1925 exceeded the corresponding number employed in 1924 by less than one per cent.

Principal data having reference to manufacturing in each of the 39 cities of the Commonwealth, with totals for the State and for the 316 towns grouped together, are presented in the following table.

¹ This series of "Press Notices" includes the following:

Nos. 1-39. *Individual Cities*. A separate "press notice" for each of the 39 cities contains data by principal industries in 1925 with comparable data for specified industries for certain prior years.

No. 40. *Summary by Cities*. Totals only for each city, 1925.

No. 41. *General Summary for the State*. Principal data by years, 1913 to 1925.

No. 42. *Metropolitan Boston*. Principal data by municipalities and industries. Copies of these mimeographed "Press Notices" are available for distribution.

*Principal Data Relative to Manufactures in the 39 Cities in
Massachusetts, 1925.*

CITIES	Number of Estab- lishments	Value of Stock and Mater- ials Used	Amount of Wages Paid During the Year	Average Number of Wage-earners Employed	Value of Products
<i>The State</i>	<i>10,141</i>	<i>\$1,813,151,139</i>	<i>\$718,928,073</i>	<i>593,193</i>	<i>\$3,451,378,504</i>
<i>39 Cities</i>	<i>8,094</i>	<i>1,391,005,100</i>	<i>542,942,702</i>	<i>446,070</i>	<i>2,652,813,086</i>
Attleboro	142	14,624,556	6,534,140	5,295	27,984,019
Beverly	44	3,263,400	4,626,185	3,580	11,803,321
Boston	2,655	303,175,079	104,845,860	78,093	602,332,668
Brockton	265	36,370,140	15,732,922	13,148	69,692,575
Cambridge	360	76,815,172	27,814,372	21,946	166,312,372
Chelsea	123	17,240,887	7,836,477	6,328	33,427,798
Chicopee	50	47,455,405	13,647,433	10,530	86,996,782
Everett	113	29,422,554	7,685,806	5,246	51,469,366
Fall River	238	95,265,944	28,267,520	30,599	143,168,472
Fitchburg	103	30,275,314	10,558,840	8,887	51,047,764
Gardner	80	7,694,665	5,039,995	4,313	18,007,542
Gloucester	83	7,908,014	2,423,941	2,271	13,320,852
Haverhill	450	26,509,483	13,965,712	11,568	55,384,991
Holyoke	172	47,098,714	18,972,816	17,013	88,301,389
Lawrence	178	124,352,224	31,011,879	26,298	176,111,155
Leominster	84	8,831,189	5,420,085	5,017	19,953,507
Lowell	257	43,623,531	21,172,888	21,553	81,367,892
Lynn	348	34,818,925	26,296,528	18,968	97,151,620
Malden	100	13,286,123	4,581,153	4,226	25,783,457
Marlborough	36	6,884,973	3,551,858	3,504	12,688,028
Medford	53	3,889,043	1,607,264	1,332	7,016,395
Melrose	23	2,548,736	798,110	740	4,742,374
New Bedford	202	79,931,507	37,138,795	35,756	143,585,848
Newburyport	46	5,589,553	2,838,027	2,554	11,877,397
Newton	56	8,274,041	3,290,738	2,680	16,535,953
North Adams	51	16,048,230	5,503,265	4,755	27,385,833
Northampton	48	7,291,674	4,085,811	3,399	16,078,482
Peabody	76	13,519,674	7,442,874	5,832	27,267,230
Pittsfield	62	20,181,600	12,515,019	9,207	52,469,770
Quincy	138	9,429,048	8,702,119	5,325	23,171,557
Revere	19	553,025	298,174	196	1,314,243
Salem	114	13,604,492	5,398,104	4,358	26,776,893
Somerville	138	47,882,566	6,939,529	5,451	60,294,886
Springfield	342	46,691,201	23,350,874	17,786	109,999,635
Taunton	110	15,605,468	7,513,124	6,683	31,773,781
Waltham	94	5,811,337	6,282,467	5,071	19,606,113
Westfield	64	5,516,732	3,668,408	2,977	14,105,456
Woburn	48	7,213,823	2,687,425	2,022	13,962,583
Worcester	529	106,507,058	42,891,115	31,563	212,543,082
316 Towns	2,047	422,146,039	175,985,376	147,123	798,565,418

The total number of manufacturing establishments in the 39 cities in Massachusetts, considered as a group, was 8,094; the total value of products manufactured in the 39 cities in 1925 amounted to \$2,652,813,086; the value of stock and materials used in manufacture was \$1,391,005,100; and the difference between these amounts (\$1,261,807,986) represents the value added by the various manufacturing processes. The average number of wage-earners employed in the 8,094 establishments in the 39 cities during the year was 446,070, and the total amount paid in wages was \$542,942,702.

The total value of products manufactured in the 39 cities in 1925 (\$2,652,813,086) constituted 76.9 per cent of the aggregate value (\$3,451,378,504) of all products manufactured in the Commonwealth in that year, and the average number of wage-earners (446,070) employed in the manufacturing industries in the 39 cities constituted 75.2 per cent of the average number of wage-earners (593,193) employed in all manufacturing establishments in the State. It is of interest in this connection to note that the total population of the 39 cities (as of March 31, 1925) was 2,909,767 and these constituted 70.2 per cent of the aggregate population (4,144,205) of the State.

As a manufacturing center Boston ranked first among the cities of the Commonwealth. The value of the products manufactured in the city in 1925 was \$602,332,668, constituting 17.5 per cent of the aggregate value of all products manufactured in the entire State during the year. In order of importance, based on the value of products manufactured in 1925, the twenty leading cities were: Boston, Worcester, Lawrence, Cambridge,

New Bedford, Fall River, Springfield, Lynn, Holyoke, Chicopee, Lowell, Brockton, Somerville, Haverhill, Pittsfield, Everett, Fitchburg, Chelsea, Taunton and Attleboro.

In the following table data having reference to manufactures in Metropolitan Boston are presented for the several cities and towns included within this district.

*Principal Data Relative to Manufactures in Metropolitan Boston, 1925:
By Cities and Towns.*

MUNICIPALITIES	Number of Estab- lishments	Value of Stock and Mater- ials Used	Amount of Wages Paid dur- ing the Year	Average Number of Wage-earners Employed	Value of Products
<i>Metropolitan Boston</i>	<i>4,580</i>	<i>\$623,666,728</i>	<i>\$233,518,904</i>	<i>176,752</i>	<i>\$1,256,198,204</i>
<i>The 14 Cities</i>	<i>4,268</i>	<i>560,360,359</i>	<i>209,666,072</i>	<i>157,624</i>	<i>1,123,121,370</i>
Boston	2,655	303,175,079	104,845,860	78,093	602,332,668
Cambridge	360	76,815,172	27,814,372	21,946	166,312,372
Chelsea	123	17,240,887	7,836,477	6,328	33,427,798
Everett	113	29,422,554	7,685,806	5,246	51,469,366
Lynn	348	34,818,925	26,296,528	18,963	97,151,620
Malden	100	13,286,123	4,581,153	4,226	25,783,457
Medford	53	3,889,043	1,607,264	1,332	7,016,395
Melrose	23	2,548,736	798,110	740	4,742,374
Newton	56	8,274,041	3,290,788	2,680	16,535,933
Quincy	138	9,429,048	8,702,119	5,325	23,171,557
Revere	19	553,025	298,174	196	1,314,243
Somerville	138	47,882,566	6,939,529	5,451	60,294,886
Waltham	94	5,811,337	6,282,467	5,071	19,606,113
Woburn	48	7,213,823	2,687,425	2,022	13,962,588
<i>The 26 Towns</i>	<i>312</i>	<i>63,306,369</i>	<i>23,852,332</i>	<i>19,128</i>	<i>133,076,834</i>
Arlington	22	638,771	407,054	255	1,662,269
Belmont	7	104,446	116,663	86	319,956
Braintree	15	9,740,277	1,610,961	1,555	15,144,475
Brookline	24	475,050	350,431	237	1,232,843
Canton	22	3,879,791	1,377,436	1,185	7,649,131
Dedham	14	1,400,694	516,576	518	2,299,673
Hingham	4	150,373	171,720	125	495,667
Milton	5	74,025	35,292	31	184,795
Needham	21	1,581,894	691,788	619	3,173,852
Reading	15	4,082,868	612,181	453	5,915,199
Saugus	9	555,957	148,774	111	874,325
Stoneham	21	1,684,979	817,439	736	3,764,360
Wakefield	25	5,563,865	2,155,174	1,851	9,559,336
Watertown	30	22,011,529	10,271,271	7,728	57,549,671
Wellesley	11	727,102	197,770	153	2,312,898
Weymouth	27	5,484,586	2,184,066	1,924	11,059,848
Winchester	19	4,257,926	1,695,820	1,216	7,678,039
Winthrop	6	157,865	60,087	45	324,116
8 other towns ¹	15	754,371	432,329	300	1,876,381

¹ Includes four towns (Cohasset, Hull, Nahant and Westwood) in which there were no manufacturing establishments, and four towns (Dover, Lexington, Swampscott and Weston) for which data cannot be shown separately without disclosing the operations of individual establishments.

Metropolitan Boston, as defined for purposes of the annual census of manufactures in Massachusetts, comprises 14 cities and 26 towns included within a radius of about 15 miles from the State House in Boston. Within this area were located 4,580 manufacturing establishments in which products valued at \$1,256,198,204 were manufactured in 1925. The average number of wage-earners employed in these establishments during the year was 176,752 and the total amount paid in wages was \$233,518,904. The number of manufacturing establishments in Metropolitan Boston in 1925 constituted 45.2 per cent of the total number (10,141) in the entire State, the value of products manufactured constituted 36.4 per cent of the total value of all products manufactured in the State, and the number of wage-earners was 29.8 per cent of the total number employed in all manufacturing establishments in the State.

Among the large number of manufacturing industries in Metropolitan Boston in 1925 the boot and shoe industry outranked all others. In this district, which includes Boston, Lynn and several other municipalities in which the manufacture of footwear is important the value of boots and shoes manufactured in 1925 (including boot and shoe cut stock and find-

ings, but not including rubber boots and shoes) was \$113,233,504. The industry ranking second on the basis of product value was printing and publishing, \$93,404,810; followed in order of importance by electrical machinery, apparatus and supplies, \$71,302,683; clothing, men's and women's, \$53,398,252; rubber goods, including rubber tires and inner tubes, \$46,632,430; confectionery, \$46,045,083; boots and shoes, rubber, \$45,949,057; slaughtering and meat packing, wholesale, \$44,845,315; bread and other bakery products, \$44,278,584; and foundry and machine-shop products, \$40,511,265.

Census of Power Laundries.

All power laundries in Massachusetts were canvassed in connection with the census of manufactures for 1925 but as they are not, strictly speaking, manufacturing establishments, the returns are tabulated separately. The total number of power laundries reporting in 1925 (excluding Chinese, hotel, and hand laundries and those connected with educational institutions) was 386. Comparable data for five years follow:

Principal Data Relative to Power Laundries in Massachusetts for Years 1921-1925.

YEARS.	Number of Estab- lish- ments	Capital Invested	Cost of Materials Used	Average Number of Wage- Earners	Wages Paid	Value of Work Done
1921	312	\$7,631,864	\$2,550,033	6,631	\$6,415,295	\$14,895,451
1922	337	8,851,443	2,462,273	7,237	6,844,015	15,821,389
1923	354	10,167,924	2,864,085	7,648	7,649,807	18,235,988
1924	364	10,962,204	2,901,102	8,220	8,287,694	18,781,900
1925	386	— ¹	3,040,698	8,704	8,794,492	20,318,321

¹ Not called for on the questionnaire.

From year to year since 1921 there has been a steady increase in the number of power laundries in the State, in the capital invested in this important industry, average number of wage-earners employed, value of work done and amount paid in wages to employees. In 1925, as compared with 1924, there was an increase of 24 power laundries in the State, an increase of 5.9 per cent in the average number of wage-earners employed, and an increase of 8.2 per cent in the value of work done.

Index of Manufacturing Establishments.

Although no official directory of manufacturing establishments is published by the Commonwealth, a card index of all establishments engaged in manufacturing is maintained in this Division. This is revised in December each year for use primarily in connection with the annual census of manufactures, and is available for consultation. Whenever requests for lists of manufacturing establishments are received at this office such lists are furnished if the clerical work involved does not seriously interfere with the regular work of the Division. Occasionally inquirers are granted permission to copy the names and addresses of establishments from this index.

3. PUBLIC EMPLOYMENT OFFICES.

This report covers the operations, during the calendar year, 1926, of the four public employment offices maintained by the Commonwealth. These offices are located, respectively, at 23 Pearl Street, Boston (main office); 25 Tremont Street, Boston (mercantile office); Worthington Street and Columbus Avenue, Springfield; and 37-39 Waldo Street, Worcester. Daily reports are forwarded from the local offices to the ad-

ministrative office at the State House, where the statistical records are tabulated upon a uniform basis.

Statistical Summary.

In the following table the principal data relative to the work of the offices during the year 1926, are presented, with corresponding data for the year 1925, for comparison:

Summary of Business of the Four State Offices during the Year Ending December 31, 1926, with Comparable Data for 1925.

OFFICES.	1926			1925		
	Persons Called for by Employers	Persons Referred to Positions	Positions Reported Filled	Persons Called for by Employers	Persons Referred to Positions	Positions Reported Filled
Boston—Main Office	17,080	23,321	14,933	16,560	22,553	14,200
Boston—Mercantile Off.	1,746	3,959	1,494	1,864	4,765	1,538
Springfield Office	12,025	12,938	10,252	12,941	13,740	11,068
Worcester Office	9,088	9,792	7,615	9,828	10,023	8,000
Totals—Four Offices	39,939	50,010	34,294	41,193	51,081	34,806

Positions Reported Filled. The total number of positions reported filled during the year 1926, by the four offices combined, was 34,294, which was less by 512, or 1.5 per cent, than the number (34,806) reported filled in 1925. At the Boston (main office) there was an increase of 733, or 5.2 per cent, in the number of positions filled in 1926 as compared with the number filled in 1925, due to a large demand, principally for skilled workmen on steel shipbuilding at the Fore River Works in Quincy; but at each of the other offices there were decreases, as follows: Boston (mercantile office), 2.8 per cent; Springfield, 7.4 per cent; and Worcester, 4.8 per cent.

Persons Called for by Employers. During 1926 the total number of persons called for by employers at the four offices combined was 39,939, as compared with 41,193 called for in 1925, showing a decrease of 1,254, or 3.0 per cent. At the Boston (main office) there was an increase of 520, or 3.1 per cent, in the number of persons called for in 1926, as compared with the number called for in 1925; but at the other offices there were decreases, as follows: Boston (mercantile office), 6.3 per cent; Springfield, 7.1 per cent; and Worcester, 7.5 per cent. The extent to which employers' orders were filled in 1926 is indicated by the fact that of the 39,939 persons called for by employers, 34,294, or 85.9 per cent, were supplied, as compared with 84.5 per cent supplied in 1925.

Persons Referred to Positions. The total number of persons referred to positions during the year 1926, by the four offices combined, was 50,010, which was less by 1,071, or 2.1 per cent, than the number, 51,081, referred to positions in 1925. At each of the offices, except the main office in Boston, the number of persons referred to positions in 1926 was less than the corresponding number in 1925. In order to fill the positions offered by employers, it is often found necessary to refer more than one applicant before one can be found who is willing to accept the position, or who is acceptable to the employer. This explains why it was necessary to refer 50,010 persons to employers in order to fill 34,294 positions, or an average of nearly 1.5 persons for each position filled.

Cost of Operation. The following summary shows for the fiscal year ending November 30, 1926, the expenditures on account of each of the four offices, the number of "placements" (positions reported filled), and the per capita cost of placements, with corresponding data for the fiscal year ending November 30, 1925, for purposes of comparison.

*Expenditures, Number of Placements, and Per Capita Cost of Placements,
Fiscal Years,* 1926 and 1925: By Offices.*

OFFICES.	Expenditures		Number of Placements		Per Capita Cost of Placements	
	1926*	1925*	1926*	1925*	1926*	1925*
Boston (main office)	\$31,933.58	\$31,292.71	15,108	14,082	\$2.11	\$2.22
Boston (mercantile off.)	5,749.78	5,221.33	1,500	1,533	3.83	3.41
Springfield	14,978.46	15,112.81	10,221	11,198	1.47	1.35
Worcester	10,773.87	10,365.74	7,650	8,043	1.41	1.29
Totals	\$63,435.69	\$61,992.59	34,479	34,856	\$1.84	\$1.78

* Fiscal years ending November 30.

The total cost of operation of the four offices during the fiscal year ending November 30, 1926 was \$63,435.69, as compared with \$61,992.59 during the previous fiscal year, showing an increase of \$1,443.14 which was due, in large measure, to increases in salaries of employees. The per capita cost of placements for all offices combined during the last fiscal year was \$1.84, as compared with \$1.78 for the fiscal year ending November 30, 1925. The increase of six cents in the per capita cost was due to the increase in the total expenditures accompanied by a small decrease in the number of placements made. For the several offices the per capita costs during the last fiscal year were: Boston (main office), \$2.11; Boston (mercantile office), \$3.83; Springfield, \$1.47; and Worcester, \$1.41. For the Boston (main office), because of a large increase in the number of placements, there was a small decrease in the per capita cost, but for each of the other three offices the per capita cost for the last fiscal year was somewhat higher than for the previous fiscal year.

Records by Sex. In the following table principal data for the calendar year, 1926, are presented by sex for each of the four offices and for the four offices combined.

*Summary of the Business of the Four State Offices During the Year
Ending December 31, 1926: By Sex.*

CLASSIFICATION.	Number of Registrations ¹	Number of Per-sons Called for by Employers	Number of Persons Referred to Positions ²	Number of Positions Reported Filled ²
Boston (main office)				
Males	7,788	12,169	16,371	10,812
Females	2,129	4,911	6,950	4,121
Totals	9,917	17,080	23,321	14,933
Boston (mercantile office)				
Males	2,911	391	1,244	282
Females	5,542	1,355	2,715	1,212
Totals	8,453	1,746	3,959	1,494
Springfield				
Males	3,012	6,883	7,214	6,049
Females	2,706	5,142	5,724	4,203
Totals	5,718	12,025	12,938	10,252

Worcester							
Males	.	.	.	2,608	5,064	5,824	4,283
Females	.	.	.	1,495	4,024	3,968	3,332
Totals	.	.	.	4,103	9,088	9,792	7,615
Four Offices (combined)							
Males	.	.	.	16,319	24,507	30,653	21,426
Females	.	.	.	11,872	15,432	19,357	12,868
Totals	.	.	.	28,191	39,939	50,010	34,294

¹ Applicants for positions are registered but once each year, regardless of the number of times they apply for positions during the year.

² The number of persons referred to positions and the number of positions reported filled include duplications of individuals who were referred to more than one position or placed in more than one position during the year.

Of the 34,294 positions reported filled by the four offices combined, 21,426 or 62.5 per cent, were filled by males. At the Boston (main office) 72.4 per cent of the positions were filled by males. The mercantile office, however, which did a relatively small part of the business in Boston, found positions for a much larger number of females than males, and the number of males for whom positions were found constituted only 18.9 per cent of the total number. At the Springfield office the number of positions reported filled by males constituted 59.0 per cent of the total number of positions reported filled, and at the Worcester office 56.2 per cent of the total number of positions were filled by males. Likewise, with reference to the demand for help by employers, as indicated by the number of applications from employers and the number of persons called for, the main office in Boston was called upon to furnish a larger percentage of males out of the total number of persons called for than was either the Springfield office or the Worcester office. In part, this was due to a relatively more active demand for domestic workers at the Springfield and Worcester offices than at the main office in Boston.

Records, by Months. The following is a summary, by months, of the principal data relative to the work of the four offices combined during the calendar year, 1926.

*Summary of the Business of the Four State Offices During the Year
Ending December 31, 1926: By Months.*

MONTHS	Number of Office Days	Number of Registrations ²	Number of Persons Called for by Employers	Number of Persons Re- ferred to Positions ³	Number of Po- sitions Reported Filled ³
January . . .	25	2,291	2,787	3,624	2,451
February . . .	23	1,859	3,133	3,714	2,762
March . . .	27	2,419	3,630	4,535	3,020
April . . .	25	2,166	3,605	4,427	2,963
May . . .	25	2,220	3,868	4,845	3,366
June . . .	26 ¹	2,501	3,332	4,344	2,901
July . . .	26	2,992	2,972	3,773	2,541
August . . .	26	3,355	3,261	4,091	2,691
September . . .	25	2,375	3,810	4,649	3,175
October . . .	25	2,411	3,823	4,835	3,395
November . . .	25	2,184	3,026	4,000	2,630
December . . .	26	1,418	2,692	3,173	2,399
Totals . . .	304	28,191	39,939	50,010	34,294

¹ The two Boston offices were open 25 days in June (closed June 17).

² Applicants for positions are registered but once a year, regardless of the number of times they apply for positions during the year.

³ The number of persons referred to positions and the number of positions reported filled include duplications of individuals who were referred to more than one position or placed in more than one position during the year.

Within the districts served by the offices, their monthly records furnish a fairly accurate measure of industrial activity. It is, therefore, of interest to note that the demand for labor at these offices (as represented by the number of persons called for by employers) was much greater during the months of March, April, May, June, September, and October than during any other months of the year and the demand was relatively small during the months of January, July, and December. The number of positions reported filled during the several months varied directly with the number of persons called for by employers, as would naturally be expected when the supply of labor in nearly all industries was more than adequate to meet the requirements.

Veterans. No appropriation for the specific purpose of securing positions for veterans has been provided for the use of the Department since 1921, but the registrars at the four state offices have been instructed to give special attention to the placement of veterans and to keep, separately, the records relative to the service rendered them. In the following table data are presented showing, for each of the four offices, the number of veterans registered, the number referred to positions, and the number reported placed during the year 1926, with comparable data for the year 1925.

Number of Veterans Registered, Referred to Positions, and Reported Placed in 1926 and 1925: By Offices.

OFFICES.	1926			1925		
	Num-ber of Regis-trations ¹	Num-ber of Referred to Posi-tions ²	Num-ber of Re-ported Placed ²	Num-ber of Regis-trations ¹	Num-ber of Referred to Posi-tions ²	Num-ber of Re-ported Placed ²
Boston (main office)	1,464	2,998	2,286	1,655	2,866	2,283
Boston (mercantile office)	273	143	68	321	120	71
Springfield	117	435	283	26	217	146
Worcester	82	644	513	60	404	297
Totals	1,936	4,220	3,150	2,062	3,607	2,797

¹ Applicants for positions are registered but once each year, regardless of the number of times they apply for positions during the year.

² The number of persons referred to positions and the number of positions reported filled include duplications of individuals who were referred to more than one position or placed in more than one position during the year.

The total number of veterans who were registered at the four offices in 1926 was 1,936, as compared with 2,062 who were registered in 1925, showing a decrease of 6.1 per cent in registrations, but there was an increase from 2,797 in 1925 to 3,150 in 1926, or 12.6 per cent, in the number of veterans reported placed by the four offices. In explanation of the fact that the number of veterans referred to positions and the number reported placed exceeded the number of registrations, it should be stated that many of those registered were referred to more than one position or placed in more than one position during the year specified, whereas the number of new registrations included no duplication of individuals, except a comparatively small number in 1926, who were also registered in 1925. The records for the four offices combined show that of the 21,426 positions reported filled by males during the year 1926, 3,150, or 14.7 per cent, were reported filled by veterans.

Three years ago the work of the Employment Bureau formerly conducted by the American Legion in the State House was taken over by the Commonwealth, and this branch of the work was assigned to a special registrar (a veteran) who devotes his entire attention to the placement of veterans who apply for positions at the main office in Boston. At this office, 2,286 positions were reported filled by veterans in 1926, which num-

ber constituted 21.1 per cent of the total number of positions (10,812) reported filled by males. The records here presented illustrate the extent to which placement service is rendered to veterans at the several state offices.

Co-operation with United States Employment Service.

The Department has continued to co-operate with the United States Employment Service during the past year. The Commissioner of the Department serves as Federal Director for Massachusetts and the Director of Statistics, as Assistant Federal Director, is in immediate charge of this co-operative work. The agreement with this Department provides for the payment by the Federal service of salaries of two employees, one of whom serves as examiner-in-charge of the mercantile employment office in Boston (a Federal-State office), and the other is in charge of the Westfield office (a Federal-City office). The Federal Bureau has also contributed toward the expense on account of the rental of the mercantile office in Boston and has granted to the Department the use of the franking privilege in connection with the placement work of the State public employment offices. The total cash contribution by the Federal Bureau toward this work in Massachusetts, including the salaries of the two Federal employees and the payment on account of rental during the fiscal year ending November 30, 1926, was \$4,638. There was also some saving to the Department as a result of the use of the franking privilege.

In addition to the four State offices, eight other offices in Massachusetts are now co-operating with the Federal Service. These are as follows:

Boston:	Municipal Employment Bureau.
	Boston Urban League.
Fitchburg	American Legion, Post No. 10.
Framingham	Civic League.
Lowell	Municipal Employment Bureau.
New Bedford	Young Women's Christian Association.
Waltham	Chamber of Commerce.
Westfield	Municipal Employment Bureau.

These co-operating offices are required to furnish monthly reports and to conform to certain regulations with reference to their operation. They are supplied with certain standard forms, are granted the franking privilege in connection with their placement work, and, in some instances, have been loaned furniture and office equipment which is the property of the Federal Bureau.

APPROPRIATIONS.

The appropriations authorized for the use of the Division of Statistics during the fiscal year ending November 30, 1926 amounted to \$113,500.00. The actual expenditures during the year amounted to \$108,326.73, leaving an unexpended balance of \$5,173.27, of which balance \$2,163 is being held in reserve for payment of outstanding bills principally for printing and binding reports.

Financial Statement.

Fiscal Year Ending November 30, 1926.

	Appropriations.	Expenditures.	Unexpended Balance.
Statistical Services:			
Personal services . . .	\$38,500.00	\$36,990.56	\$1,509.44
Expenses . . .	11,000.00	7,920.48 ¹	3,079.52
Total . . .	<u>\$49,500.00</u>	<u>\$44,911.04</u>	<u>\$4,588.96</u>
Public Employment Offices:			
Personal services . . .	\$49,000.00	\$48,976.10	\$23.90
Expenses . . .	15,000.00	14,467.27 ²	532.73
Total . . .	<u>\$64,000.00</u>	<u>\$63,443.37</u>	<u>\$556.63</u>

¹ Not including outstanding bills estimated at \$2,135, principally for printing and binding reports.

² Not including outstanding bills estimated at \$28.



